

Chapter 1 Introduction

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Chapter 1

Introduction

1 INTRODUCTION

1.0 GENERAL OVERVIEW

This Environmental Impact Statement (EIS) evaluates the potential environmental impacts associated with 4 - 5 separate federal Outer Continental Shelf (OCS) oil and gas delineation drilling activities offshore southern California. Delineation is a type of exploration drilling activity that involves drilling a well to gather additional information about the nature and extent of the hydrocarbon reservoirs in areas where a discovery has already been made. The purpose of this document is to provide information for Federal, State, and local agencies and the public to evaluate the effects of the proposed delineation projects and the cumulative effects of past, present, and reasonably foreseeable actions. The preparation of an EIS to evaluate the effects of exploration drilling is unprecedented in the Minerals Management Service (MMS). Furthermore, inclusion of two cumulative impact analyses – one associated with the cumulative effects of these drilling projects and the second, longer-range analysis, associated with the full development of the currently undeveloped Federal leases in the Pacific OCS Region – is also unique to the bureau. This approach to the drilling proposals is, however, consistent with commitments made by the Secretary of the Interior and the MMS to the State of California in 1999.

There is 79 federal OCS oil and gas leases offshore California (figure 1.0-1). Thirty-six of these leases are undeveloped, and they lie about 3 to 12 miles offshore Santa Barbara and Ventura Counties. These 36 leases are grouped into nine units, with one individual lease that is not unitized (figure 1.0-2; table 1.0-1). A unit is defined as a number of leases grouped together to prevent waste, conserve natural resources, and protect Federal royalty interests. Operators of four of these units, which include a total of 17 leases, are expected to propose to drill 4 - 5 delineation wells (figure 1.0-3; table 1.0-2). For the purposes of analysis in this EIS, we analyzed impacts by unit.

The 4 - 5 proposed activities that serve as the Proposed Action for this EIS would use a semi-submersible drilling vessel, commonly referred to as a mobile offshore drilling unit (MODU). The MODU would move from project to project, sequentially drilling a total of 4 - 5 wells on four separate units (table 1.0-2). Each of the four subject units has been previously explored under Exploration Plans (EP's) approved by the MMS and found consistent with the California Coastal Management Plan by the California Coastal Commission. Operators are expected to submit revisions to 4 - 5 EP's. The operators of these units – Nuevo Energy Company, Aera Energy LLC, and Samedan Oil Corporation – propose to drill delineation wells to complete their data on reservoir configuration and characteristics. It will take 68-92 days to drill and test each well. The first well would commence drilling in May 2002 and the last well in May 2003. The data received from these wells will assist the operators in determining how to develop and produce the oil and gas reserves underlying these and possibly adjacent units.

Under separate actions, operators for three units (eight undeveloped leases total) have proposed or are expected to propose exploration and/or development from existing federal offshore platforms. Exploration drilling has been proposed from existing platform Gail for the Cavern Point Unit; development has been proposed from existing Platforms Hidalgo, Harvest, and Hermosa for the Rocky Point Unit; and delineation drilling is expected to be proposed from existing Platform Hermosa for the Sword Unit. In the event that there are commercial finds of hydrocarbons from the proposed drilling on the Cavern Point and Sword Units, then the operator will propose development from existing Platform Gail and Platform Hermosa, respectively. These proposals are being or will be evaluated in Environmental Assessments (EA's) separate from the analyses in this document, though they are included in the cumulative analyses in this EIS to provide a complete picture of foreseeable actions for all of the 36 undeveloped leases.

The MMS estimates that the preliminary scenarios received for the development of these 36 leases

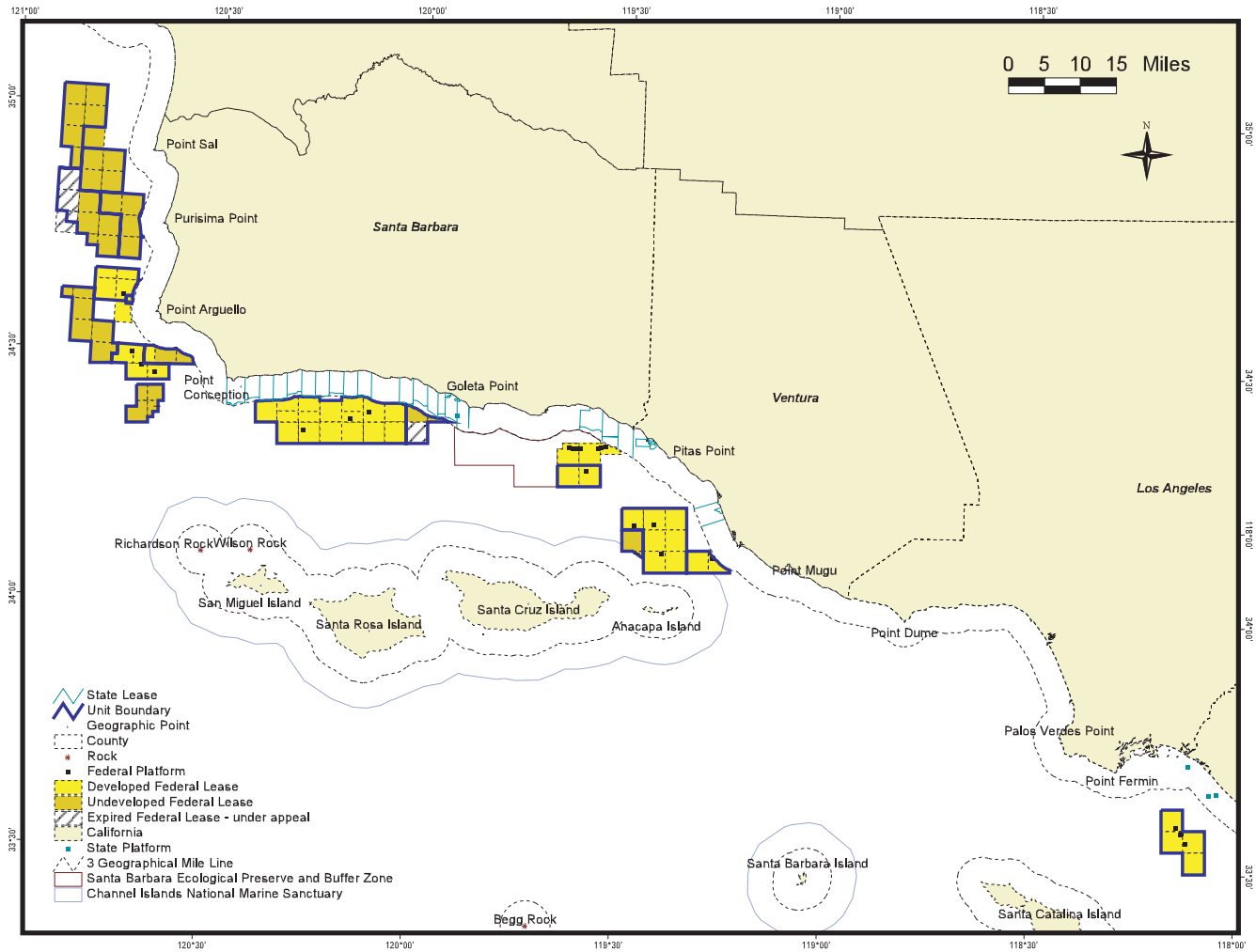


Figure 1.0-1. The 79 federal OCS oil and gas leases offshore southern California.

Table 1.0-1. The 36 undeveloped leases offshore Ventura, Santa Barbara, and San Luis Obispo County. The leases are presented in geographical order from North to South.

Lease No. (OCS-P)	Unit	Operator
0409	Individual Lease	Aera Energy LLC
0396, 0397, 0402, 0403, 0408, 0414	Lion Rock	Aera Energy LLC
0415, 0416, 0421, 0422	Point Sal	Aera Energy LLC
0426, 0427, 0432, 0435	Purisima Point	Aera Energy LLC
0425, 0430, 0431, 0433, 0434	Santa Maria	Aera Energy LLC
0443, 0445, 0446, 0449, 0499, 0500	Bonito	Nuevo Energy Company
0452, 0453	Rocky Point	Arguello Inc.
0319, 0320, 0322, 0323A	Sword	Samedan Oil Corporation
0460, 0464	Gato Canyon	Samedan Oil Corporation
0210, 0527	Cavern Point	Samedan Oil Corporation

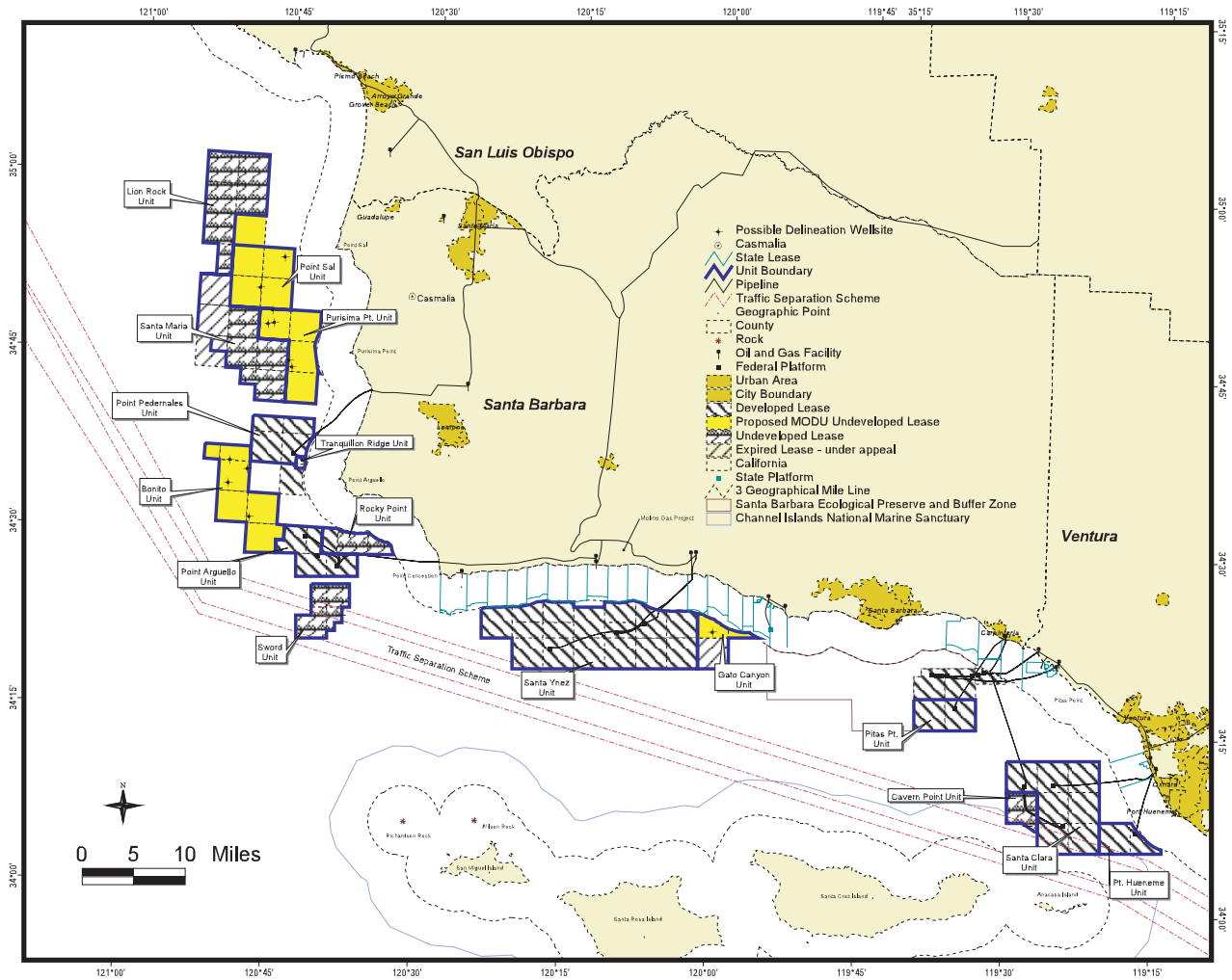


Figure 1.0-2. The 36 undeveloped federal OCS oil and gas leases offshore southern California: Point Sal Unit, Purisima Point Unit, Bonito Unit, Rocky Point Unit, Sword Unit, Gato Canyon Unit, and Cavern Point Unit. Individual lease OCS-P 0409 is located north and adjacent to the Point Sal Unit.

Table 1.0-2. The Proposed Action analyzed in this Environmental Impact Statement.

Proposed Delineation Wells (No.)	Lease No. (OCS-P)	Unit	Operator
1	0415, 0416, 0421, 0422	Point Sal Unit	Aera Energy LLC
1	0426, 0427, 0432, 0435	Purisima Point	Aera Energy LLC
1-2	0443, 0445, 0446, 0449, 0499, 0500	Bonito	Nuevo Energy Company
1	0460, 0464	Gato Canyon	Samedan Oil Corporation

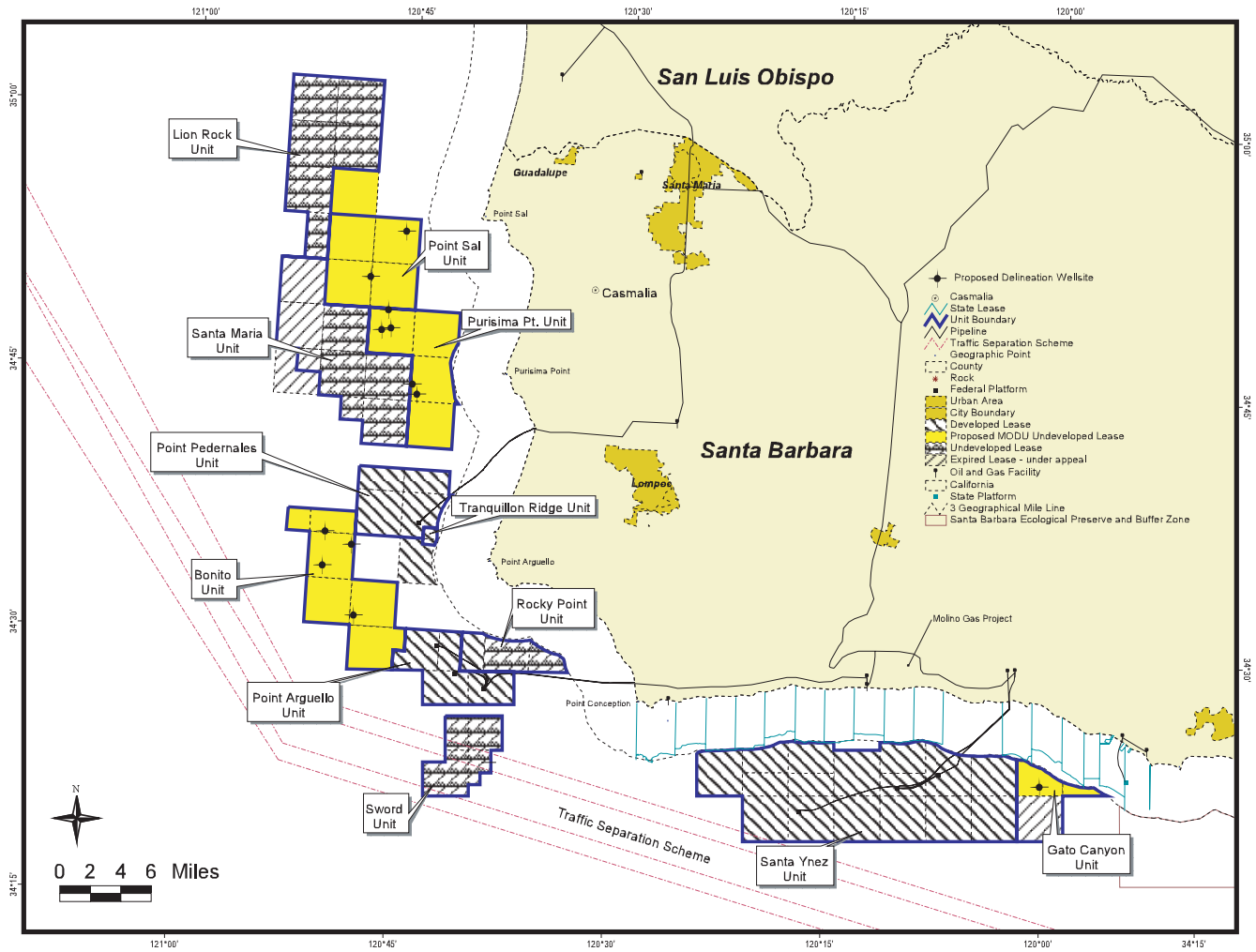


Figure 1.0-3. Locations of the four federal OCS oil and gas units offshore southern California where drilling activities are proposed: Point Sal Unit, Purisima Point Unit, Bonito Unit, and Gato Canyon Unit.

could recover 558 million bbls of oil and 208 billion cubic feet of gas. Field production life is expected to be about 15 – 18 years. The impact analyses in Chapters 5 and 6 were prepared using the above case. Section 6.3 provides an assessment of impacts of a much more unlikely high case for the 36 leases.

This EIS is based on project descriptions provided by the operators to the MMS in February and November 2000. Activities involved in drilling each delineation well will be covered in separate revisions to 4 - 5 EP's submitted to the MMS by the operators, though not until September 2001. As OCS statute and regulations dictate, the MMS has only 30 days following the receipt and acceptance of the revisions to approve, require modification to, or disapprove the revisions. This is not sufficient time to prepare the breadth of analysis the MMS and the Department of the Interior has committed to provide to the public. Thus, the project descriptions, updated through dis-

cussions with the operators in the intervening months, provide the most complete picture on which to base the analyses contained herein.

As a result of reliance on the project descriptions rather than the revisions to the previously approved EP's, the MMS has, in many instances, made its own estimates of the types and level of activities and other anticipated actions to assess a level of impacts that either represents what is finally proposed by the operators or exceeds what they propose. If the MMS determines that the impact levels provided in the revisions to the EP's actually exceed the activities, levels of activities, or other actions evaluated in this EIS, then prior to making a decision on the revisions to the EP's, the MMS will prepare subsequent analytical documentation pursuant to the National Environmental Policy Act (NEPA).

Because the Proposed Action is delineation drilling, there is a higher probability of future development of the hydrocarbon resources on these undevel-

oped leases than for the typical, wildcat exploration well. When the operators make a decision to pursue development, each operator would submit a separate Development and Production Plan (DPP) to the MMS. The DPP ('s) would be subject to full review and public coordination under the NEPA, the OCS Lands Act, and all other required federal, state, and local laws and regulations. This includes review by the California Coastal Commission to determine whether the DPP ('s) are consistent with State requirements to the extent allowed by the Coastal Zone Management Act.

This EIS and the cumulative assessment of the development of all 36 leases are provided pursuant to commitments made by the MMS to the Governor of California in July 1999 and by the Secretary of the Interior to the California Coastal Commission in November 1999. The Secretary directed an approach to the undeveloped leases based on requests received at various times by the California Coastal Commission, the Governor, and other parties concerned about the prospect of additional drilling offshore California. He directed that, "because the lessees indicate that they will submit new or revised exploration or development and production plans for review, no drilling activity requested in such plans can be undertaken on the remaining leases pending the following:

- (1) completion of an environmental analysis of the potential impacts associated with the proposed activity, including cumulative impacts analysis that takes into account changed circumstances that have occurred since the original plan approval;
- (2) disclosure of the lessees detailed plans regarding additional exploration and development activities that the lessees are hoping to pursue, so that authorities and the interested public will have full disclosure of the proposed actions in question; and
- (3) The maximum review of such proposed actions allowed under all applicable laws and regulations, including, in particular, review by the California Coastal Commission of whether proposed actions are consistent with state requirements to the extent allowed by the Coastal Zone Management Act."

This document addresses the first of these directives. The full spectrum of potential impacts associated with the proposed activities is analyzed in detail in this EIS. In Chapter 5, the cumulative impacts of past, present, and reasonably foreseeable activities in the area, including the delineation drilling projects and their residual effects (2002-2006), are discussed under each resource category. In Chapter 6, the past, present, and reasonably foreseeable activities in the

area are analyzed for the period 2002-2030, followed by the effects of the incremental addition of the hypothetical development of all 36 undeveloped leases.

The MMS hypothesizes a scenario for the development of the 36 leases as part of the previously described commitments. The inclusion of analysis of the hypothetical development scenario in this document is expected to be useful to agencies and the public, and it should provide an early view of the future development of energy resources in the area. The hypothetical development scenario described in chapter 6 includes 4 - 5 new platforms on five units with associated subsea pipelines and power cables and a new processing facility in North Santa Barbara County. Production from three new platforms in the Northern Santa Maria Basin would be transported to the new facility, while production from one platform in the Southern Santa Maria Basin and one platform in the Santa Barbara Channel would go to existing facilities. Together, the hydrocarbon fields in the five units could produce, in the base case, about 468 million barrels of oil and 169 billion cubic feet of gas during a field production life of 15 - 18 years. We also describe the hypothetical development of the Rocky Point Unit from existing Platforms Harvest, Hermosa, and Hidalgo; development of the Sword Unit from existing Platform Hermosa; and, development of the Cavern Point Unit from existing Platform Gail. Production from these existing platforms would be transported to shore via existing subsea pipelines and processed in existing onshore facilities. The total estimated reserves for the 36 undeveloped leases is 558 million bbls of oil and 208 billion cubic feet of gas. Field production life is expected to be about 15 - 18 years. The much more unlikely high-case development for the 36 leases, about 660 million bbls of oil and 232 billion cubic feet of gas with a field production life of about 20 - 25 years, is addressed in section 6.3.

This EIS provides Federal, State, and local agencies and the public with information on the potential impacts of delineation drilling activities involving a total of 4 - 5 wells drilled from a single MODU over about a 14-month period. It will serve as an important document for the MMS decisions on the EP's submitted for these projects, and it may be augmented by additional NEPA documents if the EP's exceed the level or type of activities addressed in the EIS. Furthermore, if development and production is proposed in this area, DPP's will be submitted and NEPA documents will be prepared with full public review and input.

The leasing history for federal waters offshore southern California is presented in appendix 1.1. The suspension history, lease stipulations, and exploration history for the 36 undeveloped leases is presented in appendix 1.2. The history of the State of California offshore oil and gas development and legislation is presented in appendix 1.3.

1.1 PURPOSE AND NEED

The MMS is required to balance orderly energy resource development on the subject leases with the protection of the human, marine, and coastal environment in accordance with the requirements of the OCS Lands Act (OCSLA). The OCSLA directs the Secretary of the Interior to establish policies and procedures that expedite exploration and development of the OCS, in order to achieve national energy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade. The Secretary’s responsibilities under this act have been delegated to the MMS.

PURPOSE

The purpose of the Proposed Action for the operators of four specific undeveloped OCS oil and gas units is to gather detailed information on oil and gas characteristics, reservoir characteristics, and reservoir extent.

NEED

The need of these operators is to determine the future location, size, and type of OCS oil and gas production facilities necessary for development of these units.

Consistent with its contractual obligations to the Federal Government under the OCS lease instruments, the lessees and operators of the Bonito, Point Sal, Purisima Point, and Gato Canyon Units were required by the MMS to submit project descriptions. Each of the operators submitted a project description to the MMS for the following reasons:

- Leaseholders have a legal right to pursue development of the oil and gas resources;
- Commercial quantities of oil and gas have been discovered;
- Leaseholders are obligated, pursuant to law and via lease terms, to diligently develop the resources; and
- The November 12, 1999, Suspensions of Production on the leases granted by the MMS required the operators to achieve their schedule of events leading to the commencement of production by the submission of project descriptions to the MMS by February 2000, the revisions to the EP’s by September 2001, and the drilling of delineation wells. These milestones are shown in table 1.1-1.

Table 1.1-1. The milestone dates for the commencement of delineation drilling on the four units.

Unit	Commencement of Delineation Drilling (Date)
Bonito	5/1/02
Pt. Sal	11/1/02
Purisima Point	2/1/03
Gato Canyon	5/1/03

Decisions to be made: The MMS will prepare 4 - 5 separate Records of Decision (ROD), one for each operator’s planned activities. Operators are expected to submit revisions to 4 - 5 EP’s. The ROD will record the MMS’s selection of the Alternative(s) and mitigation measures discussed in this EIS.

After review of the revisions to the EP’s, the MMS, pursuant to 30 CFR 250.203(i) will make 4 - 5 separate decisions to:

- Approve;
- Require the lessee to modify any revision to a plan which is inconsistent with the provisions of the lease, the OCSLA, or the regulations prescribed under the OCSLA including air quality, environmental, safety, and health requirements; or
- Disapprove the revision to the EP if the proposed activity would probably cause serious harm or damage to life (including fish and other aquatic life), property, natural resources offshore including any mineral deposits (in areas leased or not leased), the national security or defense, or the marine, coastal or human environment, and that the proposed activity cannot be modified to avoid the condition(s).

Each of the operators must also apply for permits and approvals under other Federal, State, and local laws and regulations. These other permits and approvals are subject to separate environmental and technical reviews. The other decisions and/or reviews may include, but are not limited to:

- Consistency review by the California Coastal Commission (CCC)
- Permit review by the Santa Barbara County Air Pollution Control District (APCD) (Authority to Construct Permit and Permit to Operate)
- Permit review by the Environmental Protection Agency (National Pollutant Discharge Elimination System (NPDES) permit)

- Endangered Species Act (Section 7) review by the Fish and Wildlife Service and National Marine Fisheries Service

1.2 READER'S GUIDE TO THE USE OF THIS DOCUMENT

It is important for the reader to remember several important concepts when reading this document:

- **The Proposed Action analyzed in this EIS is delineation drilling.** Delineation drilling is a form of exploration drilling used to delineate any hydrocarbon reservoir to enable the lessee to decide how to proceed with development and production. Previously announced discoveries of commercially recoverable oil and gas resources have been made on each of the subject units.
- **Most of the impacts that could potentially occur as a result of the delineation drilling would be limited to the general geographic area of the operations.** However, in this EIS, the Description of the Affected Environment (chapter 4) covers a much broader geographic scope, because we analyze the effects of a hypothetical development scenario on all of the 36 undeveloped leases in chapter 6; and the effects of past, present, and reasonably foreseeable activities. By definition, the impacts of development have the potential to be substantially greater and could have a broader geographic scope of impacts than we have estimated for delineation drilling. The factors that expand the geographic scope include:
 - 1) The hypothetical placement of development platforms;
 - 2) The subsea pipelines to transport oil and gas to existing platforms and/or existing or new onshore facilities; and
 - 3) Potential oil spill effects over a greater area and longer timeframe than the Proposed Action.
- **There are *two* cumulative analyses in this document: a cumulative analysis for the period 2002-2006, presented in chapter 5; and a cumulative analysis for the period 2002-2030, presented in chapter 6.**
- **The first cumulative analysis (2002-2006), chapter 5,** is based on the temporal and geographical overlap of impacts that could occur as a result of the Proposed Action (delineation drilling). The time period for this impact

has been determined to be 2002 – 2006. This 4-year period exceeds the 14 months of delineation drilling on the four units, because of the potential for impacts to certain resources (e.g., soft bottom benthos) to last this long. In this cumulative analysis, we analyze the incremental effect of the Proposed Action when it is added to the effects of past, present, and reasonably foreseeable activities in the area of consideration. These activities include existing oil and gas operations on both undeveloped **and** developed leases plus other actions in the area.

- **The second cumulative analysis (2002-2030), chapter 6** is based on the combination of the delineation drilling and the development, production and decommissioning activities on all the 36 undeveloped leases. The time period for these impacts has been determined to be 2002 – 2030, and it covers the time for production of hydrocarbon resources in the development scenario and the decommissioning of the hypothetical platforms and other platforms. In this cumulative analysis, we analyze the incremental effect of the hypothetical development scenario for the 36 undeveloped leases when it is added to the effects of past, present, and reasonably foreseeable activities in the area of consideration. These activities include oil and gas operations on developed leases plus other actions in the area. When operators submit Development and Production Plans (DPP's) to the MMS, the actual locations, sizes, and types of activities will be known. All DPP's will be subject to a thorough review under the NEPA, MMS laws and regulations, other Federal and State laws, and they will be provided to affected agencies and the interested public for review.

Additionally, in chapter 4, Description of the Affected Environment, each description includes a discussion of the impacts of past OCS activities on the resource.

1.3 PUBLIC SCOPING

Scoping is a process by which the scope of issues and alternatives to be examined in an EIS are identified and determined. The process is public and generally continuous throughout the development of the EIS. Interagency discussions, public meetings, and written comments provide the bureau with information used to determine the scope of the document: the issues, alternatives, and mitigating measures that will be analyzed in depth in the EIS as well as those that will not be addressed.

Scoping for this EIS formally began with the publication of the Notice of Intent (NOI) to Prepare an EIS published in the Federal Register (Vol. 65, No. 226/November 22, 2000) and mailed to an extensive mailing list. The NOI provided a general description of the proposed action and alerted the agencies and interested publics of opportunities to provide comments on the proposed action and the scope of environmental analysis to be undertaken by the bureau. Notification of public scoping meetings was included in the NOI as was an invitation to comment in writing through mail and email.

The MMS met with affected agencies and the interested public early in the process to discuss the preliminary plans to develop the EIS and the interest, need, and timing for agency reviews. The MMS held a general meeting for affected agencies in November 2000. The MMS continued to meet individually with agencies and the interested public through May to discuss issues of concern. The agencies that the MMS met with included the California Coastal Commission, Channel Islands National Marine Sanctuary, Monterey Bay National Marine Sanctuary, Santa Barbara County Energy Division, Santa Barbara County Office of Emergency Services, California State Lands Commission, California Office of Historic Preservation, Santa Barbara County Air Pollution Control District (APCD), San Luis Obispo County APCD, County of San Luis Obispo Planning Department, U.S. Environmental Protection Agency, Fish and Wildlife Service, National Marine Fisheries Service, U. S. Navy, and Vandenberg Air Force Base. The Public Interest Groups we met with included the Environmental Defense Center, Get Oil Out!, Citizens for Goleta Valley, Local Ocean Network, Isla Vista Surfriders, CalPIRG, U.S. Congresswoman Lois Capps' Representative, League of Woman Voters, a public observer, State Senator Jack O'Connell's Representative, the Joint Oil/Fisheries Liaison Office, and several commercial fishermen. As part of the ongoing consultation process, MMS solicited input regarding Native American concerns from the federally-recognized Santa Ynez Band of the California Mission Indians, the California Native American Heritage Commission and Chumash groups and individuals.

Two public scoping meetings were held in order for the MMS to hear oral statements concerning the scope of the document. The first public meeting was held in Santa Barbara, California on December 6, 2000. About 35 people attended the meeting, and 11 provided oral comments. On January 22, 2001, MMS held a second public scoping meeting in Santa Maria, California. About 135 people attended, and 47 provided oral comments. Written comments were also submitted at each meeting. At the January public meeting, the MMS encouraged the public to provide scoping comments by February 22, 2001. This date was also

announced on the Region's web pages (<http://www.mms.gov/omm/pacific/index.htm>).

The MMS received numerous comments by mail and electronic mail. The initial steps of the planning process for the MMS 5-Year Oil and Gas Leasing Program were initiated during the scoping process for the Delineation Activities EIS. While no acreage offshore California will be included in the upcoming program, MMS did receive numerous messages that addressed both the 5-Year Program and the subject of this EIS. These comments were all read and considered in the scoping process for this EIS.

The comments received are summarized in table 1.3-1 and table 1.3-2. Substantive reasons for the commentor's objections or support were considered and are included in table 1.3-1, which highlights the comments received on the issues, mitigation, and alternatives. Comments on the proposal (table 1.3-2) provide feedback from members of the public to the MMS concerning future drilling.

The Governor of California raised several issues related to the 36 undeveloped leases in a letter to the MMS dated June 11, 1999. The Governor's key issues included a request of the MMS to provide an assessment of the onshore and offshore impacts of potential development activity, including an analysis of the cumulative impacts of existing, approved, proposed, and projected development.

The California Coastal Commission Executive Director raised several issues related to the 36 undeveloped leases in a letter to the MMS dated August 5, 1999. The issues related to the changed circumstances since the leases were issued, or since earlier NEPA analysis was performed by the MMS. The issues, phrased as questions, include:

- How will activities affect the sea otter population, taking into account the increase in the sea otter range into the Santa Barbara Channel?
- What are the possible effects on the Monterey Bay National Marine Sanctuary, which was not a sanctuary at the time plans were originally reviewed?
- How will changes in State and local air quality regulations and their implementation affect future exploration of development?
- What are the changes in water quality regulations and anticipated further changes in those regulations?
- What new information is available concerning the impacts of drill muds and cuttings on hard bottom habitat?

Table 1.3-1. Public EIS scoping comment summary – EIS content comments.

Category	Comment
Comprehensive Analysis	Analyze effects of developing all 36 undeveloped leases in context of ongoing and future projected activities, onshore and offshore
	Area-wide, comprehensive EIS should analyze development of all undeveloped leases, with project-specific EIS's appropriately developed when applications/plans are submitted
	Comprehensive analysis should address: <ul style="list-style-type: none"> ▶ ▶ impacts air and water quality, toxic contamination of soil, wildlife, marine life (including effect of acoustics), conflicts with State efforts to protect coast ▶ ▶ upstream effects of production onsite and offsite – refining and consumption of products ▶ ▶ onshore and offshore facility effects ▶ ▶ decommissioning of offshore facilities ▶ ▶ pollution from every step of oil exploration and development including drilling, disposal of muds and cuttings, etc. ▶ ▶ transportation, onshore and offshore, of hydrocarbons ▶ ▶ onshore infrastructure including aging infrastructure and potential upgrades to these facilities
	Include specific information about the full gamut of delineation activities: volume of oil recovered, mode of fluids transport, air quality effects, how wells will be capped, etc.
	Discuss speculative nature of cumulative analysis, given that proposals for the developments have not been received for all 36 undeveloped leases; explain subsequent analyses required for consideration of development and production, and decommissioning
Alternatives	Provide analysis of worst-case scenario
	Objectively investigate viable alternatives
	Consider alternative energy production as alternatives to proposed action
Socioeconomic Resources	Include full spectrum of alternatives including no development, extending marine sanctuary to cover entire area, buying back leases
	Address alternative MODU's, alternative schedules, alternative well locations, alternative disposal methods for drilling muds and cuttings
	Analyze psychological impacts of continued oil industry in area
	Analyze effects on marine-and coastal-dependent recreation: surfing, diving, whale watching, birding, beachcombing, fishing
	Analyze effects on tourism
Coastal and Marine Resources	Mitigation for high tourism areas: schedule drill rig to avoid predominant tourist/recreation season
	Analyze social impacts including loss of quality of life
	Analyze effects on commercial fishing including: <ul style="list-style-type: none"> ▶ ▶ displacement or impairment by oil and gas activities ▶ ▶ displacement or impairment by seismic ships, exploratory vessel, platforms, pipelines, abandonment activities ▶ ▶ conflicts between long-term businesses (fishing) and short-term activities (oil and gas) ▶ ▶ conflicts with vessel traffic servicing offshore activities ▶ ▶ conflicts with debris following abandonment including capped but not thoroughly abandoned wells
	Analyze adverse effects on efforts to attract clean industries to area
	Evaluate construction and operating costs/savings associated with submerged platforms relative to conventional platforms; weigh against social cost of littering coastline and social benefit of preserving/restoring natural beauty of coast
	Address social issues such as San Luis Obispo law prohibiting offshore drilling and onshore support
	Address visual and scenic impacts – viewshed degradation
	Address growth inducing factors: increased industrial and urban activity and effect on character/enjoyment of area
	Include study of how destruction of coastal resources affects cultural heritage of California Indian Tribes
	Address possible offshore sites of cultural importance; include mitigation for known and suspected cultural sites offshore
	Study adverse health impacts of oil development, production, dependency
	Analyze impacts on socioeconomic resources and values
	Address economic effects on onshore economies of OCS purchase of air pollution offsets – how allocation of remaining offsets results in economic hardship by limiting or precluding new businesses or expansion of existing business
	Evaluate onshore economic effect of supplying electricity to offshore facilities
	Evaluate all possible crew and supply boat facility sites
Analyze direct and indirect contributions and deficits associated with offshore oil and gas to local economies	
Analyze potential effects to fresh-water aquifers extending offshore	
Thoroughly cover potential impacts to marine mammals including impacts on marine mammal migration and acoustic effects of operations	
Examine impacts from oil spills as cleanup efforts can be more destructive than spill itself	
Cover full range of impacts, such as disposal of drill muds and cuttings and acoustical impacts of operations, to marine life in already stressed system	
Address bio-productivity issues	
Address endangered and threatened species concerns including sea otters, elephant seals, steelhead trout	
Employ recent data on harmful effects of exploration and drilling on marine life	
Analyze effects on marine protected areas; analyze proposal in light of possible expansion of CINMS and possible creation of Gaviota National Seashore	
Study habitat impacts on fisheries	
Address potential impacts on white abalone and rockfish	
Provide complete inventory of marine, nearshore, onshore biology	
Update information used in original analyses on effects of exploratory activities with: <ul style="list-style-type: none"> ▶ ▶ new marine sanctuaries ▶ ▶ new air and water quality regulations ▶ ▶ new information on oil spill cleanup capabilities ▶ ▶ new information on impacts of oil development on marine mammals and other marine life ▶ ▶ new listed species ▶ ▶ failure of sea otter translocation study ▶ ▶ information from interagency Hard Bottom Habitat Committee and High Energy Seismic Survey Team 	
Identify potentially contaminated sites associated with oil and gas development including NORM's	

Table 1.3-1. Public EIS scoping comment summary – EIS content comments (continued)

Category	Comment
	Consider impacts in light of EPA proposed rule on Ocean Sites of Significance including Gorda Ridge
	Include information on natural seeps in the area and their effects on the marine environment
	Identify and ensure protection of hard-bottom areas
Air Quality	New air standards must be applied to proposal; new conformity analysis is needed for air quality
	Air quality analyses should address availability of offsets
	Explore effects of scheduling on onshore air quality
Oil Spill Analysis	Analyze potential risk of hydrocarbon spills into ocean in range of conditions
	In discussing effects of oil spills and cleanup efforts, use historical information, not models
	Address potential adverse effects of clean-up efforts
	Cover oil spill abatement and cleanup in the area including information on ocean and nearshore currents
Other	Evaluate extent to which the National Academy of Sciences identified information needs have been addressed
	Analyze effect of GPS's fiber-optic cable on operators' plans
	Assess potential for ships to collide with offshore facilities, especially north of Point Conception
	Assess potential for accidents resulting from military operations
	Include possibility of new facility sited in North County; employ findings and recommendations of Santa Barbara County 2000 North County Siting Study
	Include the environmental issues raised by the public in comments on COOGER
	Include information on investments of leaseholders to date including bonus bids, planning and design studies, drilling, etc.
	Provide description of MODU and all projected operations of MODU, in detail

- What is the new available information concerning the effects of undersea noise on marine mammals and other marine life?
- What changes in technology have taken place since review of earlier plans?
- What changes in operators have taken place since review of earlier plans?
- What are the cumulative impacts of the exploration and development of the 36 leases?

Appendix 1.5. provides summary information on these issues and directs the reader to the sections in the Draft EIS where the issues are addressed.

The determination of the issues analyzed in this EIS is based on:

- Comments that the MMS received during the public scoping process.
- The MMS's experience in defining issues from comments (concerns) expressed throughout the NEPA process for previous actions on existing leases or units, the Suspension of Production period, and seven past Federal OCS Lease Sales offshore southern California.

- The Council on Environmental Quality (CEQ) NEPA regulations, as briefly described below:

The Council on Environmental Quality (CEQ) NEPA regulations emphasize identifying (40 CFR 1501.1(d)), describing (40 CFR 1500.1 and 1502.2(a)), and analyzing (40 CFR 1501.7(2)) significant issues. Identifying, describing, and analyzing significant issues examines both the context and intensity of significance as defined by the CEQ NEPA regulations (40 CFR 1508.27). Context considers where the proposed action would occur, what the affected resources may be, and whether the effects on these resources are local or regional in extent. Intensity considers the level of any potential impacts taking into account such factors as whether the impact is beneficial or adverse, the uniqueness of the resource (e.g., threatened and endangered species), the cumulative aspects of the impact, and whether Federal, State, or local laws may be threatened.

Based on this analysis, the MMS decided on the following significant issues to be addressed in this EIS:

- Oil in the environment
- Acoustic disturbance
- Effects on physical resources (air quality, water quality)

Table 1.3-2. Public EIS scoping summary – comments on Proposed Action.

Position	Comment
Process	Lawsuit (CA vs. Babbitt) should be resolved prior to preparation of EIS on activities on the leases; EIS should be developed on decision to suspend the leases
	Analytical approach is piecemeal. EIS analysis of delineation drilling is premature. Full development of all 36 undeveloped leases should be the subject of a programmatic EIS
	Federal Register Notice of Intent to Prepare an EIS is not sufficient to enable full public comment as not enough information provided on proposed action. New, more complete FRN should be issued
Opposition to Exploration and/or Development of Undeveloped Leases	Need national energy plan
	Decrease demand; don't increase supply
	Asphalt available from other industrial manufacturing processes
	Adequate facilities exist to satisfy demand for oil
	Development of hydrocarbons presents obstacles to development of alternative energy sources
	Focus instead on finding other energy sources, encouraging conservation through pricing, investing in mass transit, developing more efficient vehicles
	Need to reduce oil dependency
	Conserve oil until needed and resources can be extracted more safely and less intrusively
	MMS lacks resources to adequately protect resources and oversee operations
	Lack of community support
	Significant risks to environment and economic base: threatened and endangered species, tourism and recreation, commercial fishing, air and water pollution, industrialization of sensitive shoreline habitats
	Local economies dependent on ocean; area economy dependent on reputation as pristine environment
	Attraction of clean industries require clean environment
	Threatens spiritual values
	Guadalupe Dunes and Avila Beach pollution illustrative of oil industry and regulatory negligence
	Future conflicts over decommissioning divides communities
	Quality of oil too poor to warrant risks
	Amount of oil too small to warrant risks
	Presents hazards to navigation in fog
	Significant oil spill risk
	Environmental impacts from normal operations unacceptable
	Unavoidable impacts that cannot be mitigated presented by exploration and development
	Gyre in area seeds entire system and resources placed at risk by oil and gas activities
Support Proposed Action	Access more energy sources and lower costs
	Demand for oil persists
	Other energy sources not yet viable
	Not appropriate to renege on contracts (leases) issued
	Area will provide a percentage of our needs; no one field will solve energy problems
	Costs of delaying development are high
	Technological improvements have been substantial and will continue to be, resulting in minimizing impacts
	Local, State, national benefits: jobs, recreational facilities, taxes/payments, etc.
	History of industry supports understanding of safe operations; oil industry is one of the safest and best regulated industries in the US
	Oil seeps are a natural phenomenon in the area
	Oil spill response mechanisms are in place and effective
	New air quality regulations will result in net benefit to onshore areas
	No data to support injury to tourism claim

- Effects on biological resources (rocky and sandy beaches, seafloor resources, kelp beds, fish resources, marine and coastal birds, marine mammals, threatened and endangered species, estuaries and wetlands, and onshore biological resources)
- Effects on refuges, preserves, and marine sanctuaries
- Effects on cultural resources including archeological, architectural, and traditional resources
- Effects on visual resources and recreation
- Effects on community characteristics and tourism resources
- Effects on commercial fisheries, recreational fishing, and kelp harvesting
- Effects on the social and economic environment, including employment and population, housing, infrastructure, public services and finance, and non-residential land use
- Effects on military operations
- Cumulative effects associated with the proposed action
- Cumulative effects associated with the development of the 36 undeveloped leases

The Alternatives to the Proposed Action include those alternatives that were raised during the public and agency scoping process and those developed by the MMS. Alternatives that are carried forward for environmental review in this EIS are described in section 3.1 – 3.3. Those alternatives are the Proposed

Action, Onshore Disposal of Muds and Cuttings, and the No Action. Alternatives that were considered by the MMS, but not carried forward in the environmental review are described, along with the reasons for why they are not evaluated in the this EIS, in section 3.4.

The MMS is in the process of coordinating with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (NMFS) pursuant to Section 7 of the Endangered Species Act; and the NMFS pursuant to the Magnusen-Stevens Act regarding Essential Fish Habitat. Refer to Appendix 4.1 and 4.2 for the related letters of correspondence. A Federal agency must make a determination that a federal action conforms to the applicable air quality implementation plan before the action is taken pursuant to Section 176(c) of the Clean Air Act (CAA), the General Conformity Rule. MMS consulted with both the EPA and Santa Barbara County APCD to decide whether conformity determinations were required for the Proposed Action. Based on EPA concurrence, the projects are presumed to conform to provisions and a general conformity determination is not required for this analysis. The MMS is also in ongoing consultations with the California Office of Historic Preservation and the federally recognized Santa Ynez Band of the California Mission Indians under Section 106 of the National Historic Preservation Act. The results of all of these consultations will be published in the Final EIS.

While the NOI for this EIS referred to “Exploratory Drilling Activities”, we use the terms “delineation drilling activities” throughout this document. As discussed in section 1.0, delineation is a *type* of exploration drilling activity that involves drilling a well to gather additional information about the nature and extent of the hydrocarbon reservoirs in areas where a discovery has already been made. Thus, the term “delineation drilling activities” better describes the type of activities that are expected to be proposed.

1.4 REGULATORY AND ADMINISTRATIVE FRAMEWORK

Information on the regulatory and administrative framework for oil and natural gas activities on the OCS may be found in appendix 1.4. This appendix references only those portions of Federal public laws enacted by Congress related directly or indirectly to the MMS’s regulatory responsibilities for mineral leasing, exploration, and development and production activities on leases located in federal waters offshore southern California. It also includes responsibilities and jurisdictions of other Federal agencies and departments that are involved in the regulatory process of oil and gas operations on the OCS.