

SUPPLEMENTARY APPENDICES
ENVIRONMENTAL ASSESSMENT (EA/EIR)

TEXACO, INC.
PROPOSED PLATFORM HABITAT

OCS-P 0234
Block 50 N., 64 W., Pitas Point Unit
Santa Barbara Channel, Offshore California

Compiled by the Office of:
Deputy Conservation Manager, Offshore Field Operations, Pacific OCS Region
160 Federal Building
1340 W. Sixth Street
Los Angeles, California 90017

May 1980

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INTRODUCTION

Texaco, Inc. submitted to the USGS a Plan of Development for Platform Habitat, Lease OCS-P 0234 (Block 50 N., 64 W., Pitas Point Unit) on September 19, 1979. The Plan was "deemed received" on September 26, 1979. Accompanying the Plan of Development were an environmental report and contingency plans.

Copies of the proposed Plan of Development and Environmental Report submitted by Texaco, Inc. were sent to:

National Park Service
Heritage Conservation and Recreation Service
Bureau of Land Management
U. S. Fish and Wildlife Service
State of California Governor's Office of Planning and Research
U. S. Office of Coastal Zone Management
Environmental Protection Agency
National Marine Fisheries Service
U. S. Coast Guard
California Coastal Commission

Comments received on the Plan of Development and Environmental Report were considered in the preparation of the EA/EIR document which supercedes the Texaco, Inc. Environmental Report. The proposed Plan of Development, Operator's Environmental Report, and related correspondence are reproduced in this appendix.

Information concerning biological and endangered species surveys, cultural surveys, as well as maps and photographs appear in the text of the EA/EIR. On June 5 to 6, 1979, the USGS met with National Marine Fisheries Service and the U. S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act; biological opinions were issued by these agencies on September 25, 1979 and November 1, 1979, respectively. The opinions covered pre-lease Sale 35, Sale 35, and Sale 48 Oil and Gas Activities on the OCS off California. The opinions concluded that identified activities, such as these similar to Texaco, Inc. Plan of Development, were not likely to jeopardize the continued existence of listed species.

A report requested from the District Geologist (now the Office of the Deputy Conservation Manager, Resource Evaluation) was an environmental geology analysis. This report also follows.

Previous related environmental documents include: Chevron U.S.A. Proposed Pipeline Installation, Santa Barbara Channel EIR/EA (Santa Barbara County, USGS, et al, 1979), Lease Sale 48 EIS (BLM 1979), Santa Barbara Channel Oil and Gas Development EIS (USGS 1976), and OCS Lease Sale 35 EIS (BLM 1975).

APPENDIX 1

BIOLOGICAL, ENDANGERED, AND THREATENED SPECIES SURVEYS

Correspondence:

U. S. Fish and Wildlife Service, Memorandum of October 22, 1979.

National Marine Fisheries Service, Letter of October 15, 1979.

Bureau of Land Management, Memorandum of November 23, 1979.

Biological Opinion, National Marine Fisheries Service, September 25, 1979.

Biological Opinion, U. S. Fish and Wildlife Service, November 1, 1979.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

GEOLOGICAL SURVEY
RECEIVED 500 BUILDING, SUITE 1692
500 N.E. MULTNOMAH STREET
PORTLAND, OREGON 97232

OCT 25 1979

LOS ANGELES

Dunaway
NOTED - ADMIN

NOTED - DUNAWAY

Reference: OBS
OCS

October 22, 1979

To: Oil and Gas Supervisor, Pacific Area, Geological Survey,
Los Angeles, California

From: ^{Acting} Regional Director, Fish and Wildlife Service, Portland,
Oregon

Subject: Secretarial Order 2974 Review Plan of Development, Pitas
Point Unit, OCS Leases P-0233, P-0234, and P-0346,
Texaco, Inc.

We have reviewed the subject plan of development and have the following comments.

1. We do not anticipate major biological impacts from the proposed actions. The platform, located in water approximately 300 feet deep, will be on substrates composed of sands and muds. The pipeline will not have major biological impact in Federal waters.
2. The Fish and Wildlife Service, Ecological Services field office at Laguna Niguel should be contacted for a review of potential onshore impacts due to pipeline construction or staging areas.
3. The Environmental Report submitted by the operator exhibits an awareness of biologically sensitive areas and potential impacts upon flora and fauna.
4. We have no objection to the proposed operation.

Bill Meyer

William H. Meyer



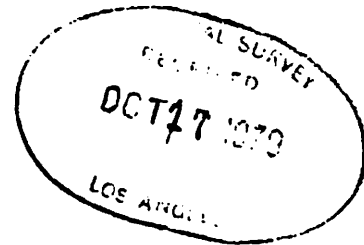
UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
300 South Ferry Street
Terminal Island, California 90731

NOTED - DUNAWAY

15 October 1979

FSW31: JHL

Mr. F. J. Schambeck
Oil and Gas Supervisor, Pacific Area
U. S. Geological Survey
1340 W. Sixth Street, Room 160
Los Angeles, CA 90017



Dear Mr. Schambeck:

Subject: Plan of Development Pitas Point Unit, OCS Leases
P 0233, P 0234 and P 0346, Texaco, Inc.

We do not feel that the proposed plan of development will significantly affect those fishery resources for which we have a responsibility. However, the plan could impact certain marine mammal species.

Our concerns are for those whale species identified in our September 25, 1979 biological opinion (enclosed) which was issued pursuant to an Endangered Species Act, Section 7 consultation between our respective agencies. This consultation addressed all Geological Survey activities ongoing and proposed for sites that were leased in either lease sale number 48 or prior lease sales in the Southern California Bight.

This consultation contains the information necessary for the completion of your environmental analysis, as well as recommendations that apply to the development of the Pitas Point Unit.

Should you require any additional information, please contact Mr. Jim Lecky of my staff at FTS 796-2518.

Sincerely yours,

Gerald V. Howard
Gerald V. Howard
Regional Director

Encl



SEP 25 1979



Mr. J. S. Cragwall, Jr.
 Acting Director
 Geological Survey
 U.S. Department of the Interior
 Reston, Virginia 22092

Dear Mr. Cragwall:

This letter responds to your May 18, 1979, request for formal consultation pursuant to Section 7 of the Endangered Species Act, as amended, regarding the possible impact to listed species from Outer Continental Shelf (OCS) oil and gas exploration activities in southern California. The enclosed biological opinion concludes that the identified activities are not likely to jeopardize the continued existence of listed species.

The opinion recommends that the Geological Survey allow the utilization of offshore storage and treatment facilities only under the most stringent safety guidelines possible and only when no other alternatives are available.

I look forward to continued cooperation in future consultations.

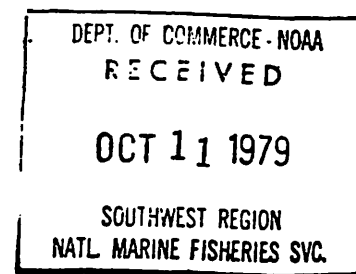
Sincerely yours,

Wilfred H. Meibohm
 for Terry L. Leitzell
 Assistant Administrator
 for Fisheries

Enclosure

cc:
 F, Fx31, F6 (T. Loughlin, J. Tyler, and R. Miller), FSW, F113
 GCF, F114, F7 (w/Enclosure)

F6:TRLoughlin, 634-1792/93, 9-13-79, blp



Endangered Species Act

Section 7 Consultation

Agency: United States Geological Survey

Activity or Program: Development of Outer Continental Shelf Oil and Gas Reserves in the Southern California Bight

Consultation Conducted by: National Marine Fisheries Service, Regional Director, Southwest Region

Summary:

By memorandum of May 18, 1979, the Director of the Geological Survey (GS) requested formal consultation on all Outer Continental Shelf (OCS) oil and gas exploration, development, and production activities in the Southern California Bight according to regulations promulgated under Section 7 of the Endangered Species Act of 1973, as amended. To assist me in responding to the request, a team was appointed consisting of representatives from National Marine Fisheries Service (NMFS) Southwest Region and Central Office. Although not participating as team members, the Southwest Fisheries Center and the Northwest and Alaska Fisheries Center were helpful in providing information used in the formulation of our biological opinion.

The team met June 5-7, 1979, with representatives of GS and the Fish and Wildlife Service consultation team to discuss ongoing and proposed GS activities in the Southern California Bight. These activities are the result of development of tracts leased in pre-lease sale 35 offerings, lease sale 35, and lease sale 48.

After reviewing available information and discussing effects of ongoing and proposed activities with GS, the consultation team recommended that GS allow the utilization of offshore storage and treatment (OS&T) facilities only under the most stringent safety guidelines possible and only when no other alternatives are available. The team also recommended that GS work with NMFS, Fish and Wildlife Service and any other concerned agencies to establish a program to monitor cumulative impacts of OCS oil and gas development on the threatened and endangered species in the area. The team concluded that the identified activities are not likely to jeopardize the continued existence of any of the endangered or threatened species in question.

Proposed Action

The project area includes the U.S. contiguous zone from Point Conception to the California-Mexico border. Five groups of tracts within the project area have been identified as potential oil and gas producing areas. These areas are the Santa Barbara Channel, the Santa Rosa Ridge, Santa Barbara Island, San Pedro Bay, and Tanner-Cortes Bank.

There are currently 15 platforms located in the Santa Barbara Channel, eight in State waters and seven in Federal waters. The majority (10) are located southwest of Carpenteria. The other five are located in the west end of the Channel; four are in State waters between Coal Oil Point and Point Conception, and one, the Hondo platform, is in Federal waters approximately five miles south of Refugio Cove. Forty subsea completions have been installed in the Santa Barbara Channel, all in State waters. An OS&T is planned for installation near Hondo platform as soon as it receives Environmental Protection Agency approval. The OS&T will separate the crude oil from the oil-water emulsion that comes from the wells. The crude oil will be stored and water will be piped back to the platform for injection into the formation. At regular intervals, depending on the rate of production, the OS&T will transfer the crude oil to shuttle tankers for transport to onshore refineries.

The only other existing platforms in the Southern California Bight are two in State waters south of Huntington Beach. There are, however, four platforms planned for installation in late 1979. Two of these will be placed in the east end of the Santa Barbara Channel and two will be placed in San Pedro Bay. There are no platforms or subsea completions in any of the other groups of tracts.

GS has estimated that approximately 371 wells will have to be drilled to adequately explore leased tracts for oil deposits. Exploration of leased tracts is currently being conducted by four drilling ships. Since there are no plans to bring in additional exploration vessels, the necessary exploratory wells will be drilled without an increase in the current overall level of activities related to exploration during the course of the project. If more drilling ships are required in order to speed up the exploration process, the cumulative environmental impacts would probably remain the same, but the increased level of activity in the short term would be more likely to have an immediate adverse impact on the species involved. An additional 87 platforms, 86 subsea completions, and over 1,000 miles of pipelines have been estimated to be required to fully develop these offshore fields. The length of time necessary for this development is 25 years and the total life of the project is estimated to be 40 years.

The distribution of the oil fields in the OCS appears to be patchy. The subsea completions are expected to be concentrated around the deep water (300m.) oil fields at the west end of the Santa Barbara Channel, in the southern half of the San Pedro Bay group of tracts, and around the Tanner-Cortes Bank. Where ecologically and economically feasible, pipelines will be used to bring crude products to existing refineries on shore. When pipelines prove infeasible, OS&T's coupled with tanker and barge transportation will be utilized. GS estimates that four OS&T systems may be required during the development of the Southern California Bight oil and gas reserves.

Endangered Species Present in the Project Area

The species of concern in the consultation were as follows:

blue whale (Balaenoptera musculus)
fin whale (B. physalus)
sei whale (B. borealis)
humpback whale (Megaptera novaeangliae)
sperm whale (Physeter catadon)

gray whale (Eschrichtius robustus)
right whale (Eubalaena glacialis)
Pacific ridley turtle (Lepidochelys olivacea)
green sea turtle (Chelonia mydas)
loggerhead turtle (Caretta caretta)
leatherback turtle (Dermodochelys coreacea)

All of these are either casual visitors or migrants through the Southern California Bight.

The North Pacific population of blue whales is approximately 1,700 individuals. A significant portion migrates through the project area from May through July on their way to their summer feeding grounds and again from September to February during their return migration to their wintering grounds in the warm waters off southern Baja California. The probable migratory pathway and distribution of the blue whale in the Southern California Bight has been described as generally offshore, very near or outside of the Channel Islands, and along the Santa Rosa Ridge to Tanner-Cortes Banks. While they are frequently observed around the Channel Islands, they are seldom seen from shore.

The North Pacific population of the fin whale numbers approximately 17,000 individuals. Fin whales may be found west of the Channel Islands year round. They are, however, most abundant in late spring or early summer.

Sei whales in the North Pacific number about 9,000 whales. Little is known about their migratory habits. Sei whales may be found off Southern California, west of the Channel Islands during the late summer or early fall. There is also a possibility that these whales may be feeding in the southern California Bight.

• Sperm whales are the most abundant of the large whales in the North Pacific, numbering about 300,000 individuals. They are common in the project area from April until the middle of June and again from late August to mid-November, indicating a northward migration in the spring and return migration in the fall. The boundaries of the migratory path are not well known but probably are quite broad.

The humpback whale is one of the most severely depleted of the whale stocks. The North Pacific population is estimated at approximately 850 individuals. A portion of this population migrates from Alaska south to its calving and breeding grounds off the western coast of Baja California, where it spends the winter months. During the summer these whales may be found in any portion of their range.

The most prominent whale occurring in the Southern California Bight is the gray whale. The current population is estimated at about 15,000 whales. Its rather narrow migratory path along the California coastline makes it the most frequently observed endangered whale as well as the species most likely to be adversely impacted as a result of OCS development. Essentially, the entire population of gray whales migrates through the project area from late September through December on its southern migration to the calving and breeding grounds in Baja California, and again on its northward migration between February and June. Juvenile gray whales have been known to take up residence for extended periods in the kelp beds along the coast and around the Channel Islands, in order to feed on the crustaceans living in the kelp canopy.

The most depleted species stock is the North Pacific population of Pacific right whales which numbers only about 220 individuals.

Individuals of all four species of listed sea turtles may be found in the project area. They are probably transient portions of their respective populations feeding at the northern limits of their ranges. They are not known to nest here. There is no historical evidence of any nesting beaches north of Guerrero Negro Lagoon, Baja California Sur, Mexico, and there are no known nesting beaches remaining on the Baja Peninsula.

Probable Impacts

The most probable source of adverse impacts on endangered species in the project area are oil spills from various sources; increased vessel traffic due to the greater number of platform support vessels as well as increased tanker and barge traffic; and increased levels of noise resulting from exploration, construction, and production activities.

The severest impacts are likely to result from a catastrophic event resulting in a large oil spill. Such events include blowouts, the sinking of or breaking up of tankers, and accidents involving OS&T's. The probability of an oil spill occurring during the life of this project has been estimated by GS to be 100%. In the light of this high probability we recognize that the availability of oil spill containment and clean-up equipment reduces the likelihood of severe impacts resulting from a spill when it does occur.

There are few data available pertaining to the effects of oil on endangered species. Some anecdotal information indicates that gray whales swim through naturally occurring oil slicks in the Santa Barbara Channel. There is no way to assess the long term or chronic effects of contacting oil. Some of the adverse effects which could result from contact with an oil spill include eye damage, inhalation of toxic fumes or aerosols, ingestion of oil, and the fouling of baleen plates.

The species most likely to be impacted by an oil spill is the gray whale. If a large spill occurred during the whales migration, a significant portion of the population could encounter the spill, and possibly suffer one or more of the adverse effects listed above.

A catastrophic spill would have the most severe impact on the North Pacific population of right whales. The probability of right whales encountering such a spill is small, because their population is so depleted. Although there has not been a documented sighting of a right whale in the project area since 1956, the elimination of just a few individuals could result in the loss of the recruitment of an entire season.

We are not aware of any information on the effects of oil on sea turtles. Presumably they would be susceptible to the same sorts of ill effects as the cetaceans. Since the few sea turtles occurring in the project area are feeding at the northern extent of their range and since there are no nesting beaches in or near the project area, the impacts of a spill on the sea turtle populations is expected to be slight.

OS&T's appear to represent a threat to the environment because they require unnecessary handling of oil at sea. The OS&T planned for installation near the Hondo platform in the Santa Barbara Channel will be located outside of the three-mile territorial sea where it will encounter the full force of the severe winter storms that occur in the Channel. Although the mooring system is designed to withstand a hundred year storm, should the OS&T break loose it would probably ground and break up, resulting in a spill of up to 200,000 barrels of oil. There is also the threat of a collision between the OS&T and the shuttle tankers that it would load. Even though the possibility of such accidents is remote, the threat of such accidents could be eliminated by utilizing onshore storage and treatment facilities coupled with nearshore marine terminals for shuttle tankers.

Increased vessel traffic increases the probability of the occurrence of whale-vessel collisions. Every year a few whales wash ashore with definite signs of injury resulting from confrontations with large vessels. We do not know how many whales are killed or seriously injured in this manner each year nor do we know the impact of this mortality on endangered species populations.

The gray whale is most likely to be impacted by increased vessel traffic because it is most abundant endangered species in the project area and its migratory route coincides with traffic lanes in the Southern California Bight. Vessel traffic could be one of the stimuli pushing the gray whale migration offshore.

Noise in the Southern California Bight issues from several sources, including commercial vessel traffic, pleasure craft traffic, fishing operations, military operations and OCS mineral development. There are no data available that indicate the relative amounts of noise contributed by each of these sources. Therefore, we are not able to predict what the impacts of noise from OCS oil and gas development on endangered species will be.

However, increased activities will increase noise levels by some degree. Our concern is that noise levels in the Southern California Bight may reach a threshold resulting in the abandonment of migratory routes and feeding grounds by endangered whales.

Estimates prior to the mid-1960's indicated only 5-10% of the gray whale population migrated along offshore routes. Recent observations indicate a higher percentage of the population is utilizing offshore routes around the Channel Islands. The reasons for this apparent offshore shift are not clear. The increasing population, currently 15,000 whales, up from 3,000 in 1952, may be expanding the migratory path seaward as a result of population pressures, or the gray whales may be migrating further offshore in an effort to avoid noise from human activities which have increased substantially in the last 20 years.

In October, 1978, humpback whales were observed feeding on Northern anchovies over the Santa Rosa Ridge. Additional feeding areas may be found around the Tanner-Cortes Bank. If noise levels reach a threshold the whales may abandon these areas, thus diminishing available feeding areas and increasing competition on remaining feeding grounds.

Conclusions:

Based on current population estimates and data on distribution of species, NMFS concludes that development of OCS oil and gas reserves in the Southern California Bight is not likely to jeopardize the continued existence of any of the endangered species under consideration.

With the exception of the gray whale, endangered cetaceans are widely distributed in the North Pacific. Their distributions serve to protect them from being inundated by activities in a relatively small portion of their ranges.

The gray whale is the species most likely to be impacted by this project because of its biannual migration through the project area. This population is recovering from heavy exploitation by commercial whalers and is approaching pre-exploitation levels. Based on this resiliency and the fact that it is a migrant through the area and not a resident, NMFS has determined that the continued existence of this species is not likely to be jeopardized.

The right whale population, if impacted by the project, is likely to suffer severely. However, the small population is widely distributed and no individuals have been reported in the project area in over 20 years. Therefore, the probability of this project jeopardizing this species is small.

The distribution and migration of Pacific ridley, green, loggerhead, and leatherback sea turtles in the eastern North Pacific is poorly known. There are no nesting beaches in the project area nor are there any nesting beaches outside the project area that would be impacted by oil from a catastrophic spill in the project area. The sea turtles found in the project area are apparently feeding near the northern limits of their ranges and, although a few individuals of each species may suffer impacts from the project, the project is not likely to jeopardize the continued existence of any of the endangered sea turtle populations.

Recommendations:

We recommend that GS establish a program to monitor the impacts of OCS oil and gas development in the Southern California Bight. The purpose of this program would be to centralize information already available to various offices within GS, so that other agencies could have access to that information. The type of information we are interested in includes, among other things, location and cause of chronic pollution, results of exploratory activities so that we may anticipate the development of areas which may be important to endangered species, and any reports on behavior of animals around drill-ships and platforms.

We recommend that GS cooperate with NMFS in the placement of observers aboard exploratory vessels and platforms when in the opinion of the Regional Director, Southwest Region, NMFS the placement of an observer may yield data useful in the determination of impacts of oil and gas development on endangered species. The Southwest Region currently reviews Environmental Reports for plans of exploration and development and could as part of the review consider the benefit of placing an observer on board a particular vessel or platform without consuming much additional time. Should the Regional Director decide to place an observer aboard a vessel or platform we would expect GS assistance in providing support.

We recommend OS&T's be utilized only when onshore storage and treatment facilities and near shore marine terminals are not feasible. NMFS is concerned with the use of OS&T's. OS&T's require extra handling of oil while at sea thus increasing the chance of a spill that could impact endangered species. We further recommend that any OS&T's that are installed be closely monitored by GS and that GS in consultation with Coast Guard and NMFS develop and implement strict procedural guidelines, for the safe transfer of oil from the OS&T to shuttle tankers, prior to the initiation of the proposed operations. These guidelines should include, among other things, criteria for the cessation of transfer of oil during high seas or inclement weather.

We recommend that GS contact the Regional Director, Southwest Region, NMFS to initiate development of a monitoring program and OS&T operational guidelines.

Finally, we recommend that consultation be reinitiated in the event that studies, being funded by the Bureau of Land Management, on the effects of noise and oil pollution on marine mammals produce information relevant to this opinion, or data indicating potential adverse impacts on listed species of whales and sea turtles become available, or should another species in the project area be listed as threatened or endangered.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southwest Region
300 South Ferry Street
Terminal Island, California 90731

NOTED - DUNAWAY

15 October 1979

FSW31: JHL

Mr. F. J. Schambeck
Oil and Gas Supervisor, Pacific Area
U. S. Geological Survey
1340 W. Sixth Street, Room 160
Los Angeles, CA 90017



Dear Mr. Schambeck:

Subject: Plan of Development Pitas Point Unit, OCS Leases
P 0233, P 0234 and P 0346, Texaco, Inc.

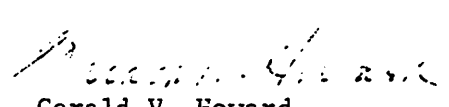
We do not feel that the proposed plan of development will significantly affect those fishery resources for which we have a responsibility. However, the plan could impact certain marine mammal species.

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This consultation contains the information necessary for the completion of your environmental analysis, as well as recommendations that apply to the development of the Pitas Point Unit.

Should you require any additional information, please contact Mr. Jim Lecky of my staff at FTS 796-2518.

Sincerely yours,


Gerald V. Howard
Regional Director

Encl

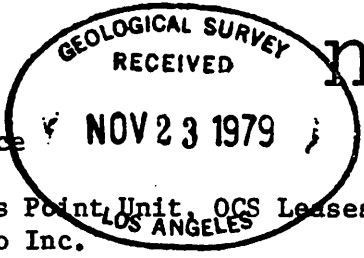


Dunaway

UNITED STATES GOVERNMENT

memorandum

DATE: NOV 23 1979



REPLY TO ATTN OF: Manager, Pacific OCS Office

1780.11
OCS-P 0233
0234
0346

SUBJECT: Plan of Development, Pitas Point Unit, OCS Leases P 0233, P 0234, and P 0346, Texaco Inc.

TO: Oil and Gas Supervisor, Pacific Area

NOTED - DUNAWAY

We have reviewed Texaco's Development Plan and Environmental Report, and our comments are:

1. There are no legal conflicts nor encumbrances; Texaco is properly designated as the unit operator.
2. Comment on cultural resources:

NOTED - ADAMS

We recommend that the proposed and alternate nos. 1 and 2 pipeline routes be surveyed for potential cultural resources. These pipeline routes are within zones of high sensitivity for shipwrecks and aboriginal sites.

3. Comment on biological resources:

We recommend a bottom grab biological survey at the proposed pipeline route.

The impacts of pipeline installation on dense populations of the tongue worm are unknown, but would probably cause an extreme population decrease in the population reported to be in excess of 1,000 g/m². Temporary disruption of pipeline placement may break the balance that holds the dense populations together. A further inhibitant to the dense populations could be the alteration of the soft bottom caused by pipelines. Since the impact and importance of these dense populations is so little known, it would be best to avoid dense populations of over 1000 g/m² wet weight.

4. Comments on Environmental Report (ER):

P.3-23

The following statement needs clarification: "No anomalies [Indicative?] of cultural or archaeological resources are known to exist in the area of the proposed action."

"Several sources of information relating to past culture...have been consulted". No such sources of information are included in "Sources of Reference" section nor is there any evidence of a cultural resource assessment. The



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OPTIONAL FORM NO. 10
(REV. 7-78)
GSA FPMR (41 CFR) 101-11.6
5010-112

source of information should be included in Appendix "A", Source of Reference. Also a cultural resource assessment should be conducted and appended to the ER.

P.3-28

The statement in the ER that nothing is known of the biotic conditions of the platform site or pipeline route is not true. The proposed construction sites would be within the area reported by the Allan Hancock Foundation (1965) as being the only area permanently occupied by large populations of the tongue worm Listriolobus pelodes.

The tongue worm Listriolobus pelodes is an infaunal species which contributes significantly to the diet of several, larger bottom associated organisms. Dietary information has not been collected for many species which feed on the bottom but such studies would probably find that the worm is an important food source for a wider variety of animals than is now known, particularly in the Santa Barbara area. This area is an extremely important bottom fish fishery area with the bottom feeding English sole comprising the majority of the catch. Species which have been reported to have gut contents consisting almost exclusively of Listriolobus pelodes are the Dover sole and the large opisthobranch molluscan Pheurobranchoea californica.

These tongue worms have also been found to be an indicator of organic pollution in fine silty bottoms (Los Angeles Sanitation Districts, 1976). Its population can expand to the carrying capacity of these environments in less than a year and quickly be reduced to small to moderate "normal" population levels (Bruce Tompson, personal communication, 1978). This characteristic allows this species to have value in future pollution indication studies.

As far as has been determined the only area within the southern California Bight that this species maintains relatively constant high population levels is within the fine sediments on the shelf south east of Santa Barbara. Even in this area populations may fluctuate significantly, ranging from 100gm/m² (Fauchald, 1971) to as high as 2,000 gm/m² (Allen Hancock, 1965). The maximum density of these populations may have stabilized at approximately 800g/m² for a period in the early 1970's (Pilger, personal communication, 1977), but more recent evidence suggests that the population is significantly below that at certain areas in the eastern part of the original dense area.

5. Texaco is proposing three alternative pipeline routes to transfer gas production to shore (Plan of Development, Section VIII). The preferred pipeline route from the platform Carpentaria would be installed and operated by Pacific Offshore Pipeline Company (POPCO). If this alternative is selected POPCO would be required to apply to this office for a BLM right-of-way for the pipeline. The application would have to be in accordance with the rules and regulations as outlined in the 43 CFR Subpart 3340 - Grants of Pipeline Rights-of-Way in the Outer Continental Shelf. It is important that the company be notified of this possible additional requirement.

We cannot recommend approval of Texaco's Plan of Development and Environmental Report until Texaco responds satisfactorily to our above comments on biological and cultural resources survey concerning pipeline routes, and on the Environmental Report.

We are returning the following information:

1. Texaco Inc - Operator. 1979. Pitas Point Unit Development and Production Plan. September. For U.S. Government use only.
2. Fairfield Industries. 1979. Engineering Geophysical Report Santa Barbara Channel (OCS -P 0234, Block 50N-64W) Offshore California. Texaco, Inc. May. For U.S. Government use only.

Enclosures

William E. Grant

FWS Bio. Opinion
Sale 48 i Prior

ACCEPTED BY THE DIRECTOR
FISH AND WILDLIFE SERVICE



United States Department of the Interior

FISH AND WILDLIFE SERVICE
WASHINGTON, D.C. 20240

In Reply Refer To:
FWS/OES 375.419
USGS 79-2

NOV 1 1979
mem. to...

Schmitt
~~D...~~
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File
Endangered
Species
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~~J...~~
Rep



Memorandum

To: Director, U.S. Geological Survey

From: ^{act 105} Director

Subject: Biological Opinion Regarding Oil and Gas Exploration and Certain Development Activities in Southern California

On April 24, 1979, the Fish and Wildlife Service (FWS) sent a memorandum to the U.S. Geological Survey (GS) requesting initiation of consultation under Section 7 of the Endangered Species Act of 1973, as amended, for Outer Continental Shelf (OCS) oil and gas exploration, development, and production activities on tracts in the OCS Sale No. 35 area (Southern California). By memorandum dated May 18, 1979, (Attachment 1) GS requested consultation with the FWS and expanded the scope of the request to include all lease sale activities off Southern California not previously subject to Section 7 consultation.

In response to this request, I appointed a consultation team by memorandum dated May 30, 1979, (Attachment 2) to assist me in determining whether the subject exploration, development, and production activities off Southern California are likely to jeopardize the continued existence of Endangered or Threatened species or result in the destruction or adverse modification of Critical Habitat of such species.

The team was comprised of Nancy Sweeney, Brian Kinnear, Steve Tonjes, and David Watts, Office of Endangered Species, Washington, D.C.; and Ralph Swanson, Sacramento Area Office, FWS.

On June 5 and 6, 1979, the FWS consultation team and National Marine Fisheries Service (NMFS) representatives met with GS representatives in Los Angeles, California, to discuss the exploration, development, and production activities in Southern California and their impact on Threatened and Endangered species within the area. A list of the participants is attached (Attachment 3).



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The consultation team reviewed reports, publications, and correspondence from knowledgeable sources on the species considered in this consultation identified below, and numerous telephone contacts were made with other experts. Information contained in the Final Environmental Impact Statements (FEIS) for OCS Sales 35 and 48, Southern California, was carefully evaluated to ascertain the effects of the exploration activities on listed species and their habitats. In addition, development plans were reviewed for seven development tracts. Copies of pertinent records and documents are included in an administrative record maintained at the Office of Endangered Species and are incorporated herein by reference.

Project Description

GS has primary regulatory authority for exploration, development, and production activities in the OCS after the issuance of the leases by the Bureau of Land Management (BLM).

Exploration of the OCS requires certain onshore support facilities including office space, helicopter and/or fixed-wing aircraft facilities, docks for boating activities, and supply bases. Due to the uncertain nature of oil exploration, companies are generally unwilling to construct new facilities to support exploration activities and usually prefer to utilize existing areas and facilities. At present, the numerous onshore facilities in Southern California being used for exploration activities will support any proposed new exploration.

Therefore, the biological opinion is based on the assumption that existing onshore facilities will continue to be utilized for exploration activities. Should the use pattern of these facilities be changed or additional onshore facilities be required which may affect listed species or their habitats, GS must reinitiate consultation.

Development and production (development/production) activities planned for seven specific tracts are included in this consultation. In the future, GS will review each development/production plan to insure compliance with Section 7.

Development/production plans include the location for the platform placement, possible transportation routes (pipelines and/or barges, tankers), and identification of specific onshore facilities and their intended use, i.e. storage, refinement, etc. These plans have more specific information than do the exploration plans.

Your request for consultation included the following species: bald eagle (Haliaeetus leucocephalus), American peregrine falcon (Falco peregrinus anatum), southern sea otter (Enhydra lutris nereis), brown pelican (Pelecanus occidentalis), California least tern (Sterna albifrons browni), light-footed clapper rail (Rallus longirostris levipes), Aleutian Canada goose (Branta canadensis leucopareia), San Clemente loggerhead shrike

(Lanius ludovicianus mearnsi), San Clemente sage sparrow (Arremonops belli clementae), Smith's blue butterfly (Shijimieoides enoptes smithi), San Clemente broom (Lotus scoparius ssp. traskiae), San Clemente Island bush-mallow (Malacothamnus clementinus), San Clemente Island larkspur (Delphinium kinkiense), San Clemente Island Indian paintbrush (Castilleja grisea), Olive Ridley sea turtle (Lepidochelys olivacea), green sea turtle (Chelonia mydas), loggerhead sea turtle (Caretta caretta), and leatherback sea turtle (Dermodochelys coriacea).

After reviewing the proposed activities and biological data on the above species, we have determined that the following species will not be affected because they are not known to occur in the impact area from the proposed exploration and the specific development/production activities. They are the Aleutian Canada goose, San Clemente loggerhead shrike, San Clemente sage sparrow, Smith's blue butterfly, San Clemente broom, San Clemente Island bush-mallow, San Clemente Island larkspur, and San Clemente Island Indian paintbrush. Therefore, they are not considered in this consultation.

The sea turtles listed above were also included in your consultation request. The NMFS has jurisdiction over Endangered and Threatened sea turtles while they are in the aquatic environment; they are under the jurisdiction of the FWS onshore. Since these four sea turtles have no known nesting sites within the proposed project area, we defer consultation to NMFS.

We feel that two additional species should be included in this consultation: El Segundo blue butterfly (Shijimieoides battoides allyni) and salt marsh bird's beak (Cordylanthus maritimus ssp. maritimus).

The following species are included in this biological opinion: El Segundo blue butterfly, bald eagle, American peregrine falcon, southern sea otter, California brown pelican, California least tern, light-footed clapper rail, and salt marsh bird's beak.

After evaluating the proposed activities and their effects on the following eight species, it is my biological opinion that these activities, as proposed, are not likely to jeopardize the continued existence of the species.

A summary of the biological data and considerations of the consultation team are provided for each of the eight species.

El Segundo Blue Butterfly (Shijimieoides battoides allyni)

The El Segundo blue butterfly is an insect endemic to the Southern California coastal strand. This species was listed as Endangered on June 1, 1976. Critical Habitat has not yet been designated for this species.

This butterfly is limited to two small remnants of the once extensive El Segundo Dunes system (36 square miles) extending from the Los Angeles Airport to San Pedro, in Los Angeles County. Its current distribution is limited to dunes adjacent to the Los Angeles Airport and a small parcel of commercially owned land on the Chevron oil refinery in El Segundo.

The El Segundo blue is dependent upon coastal dune habitat which contains two species of buckwheat (Eriogonum) that provide the butterfly with nesting, feeding, and resting habitat. The conversion of this essential dune habitat to urban developments threatens the continued survival of this species.

Onshore activities such as the placement of pipelines and the location of refineries, present the greatest threat to the destruction of this species' habitat. However, since existing onshore facilities are to be used, proposed oil and gas exploration or development/production activities are not expected to jeopardize the continued existence of this species.

Bald Eagle (Haliaeetus leucocephalus)

The bald eagle was listed as Endangered in 43 of the contiguous 48 States including California, and Threatened in the remaining five States on February 14, 1978. Critical Habitat has not yet been determined for this species. This large bird occurs from Alaska to northern Mexico and lives in association with aquatic habitats such as lakes, large rivers, and estuaries.

Bald eagles nested on the Channel Islands until the mid 1950's. Reproductive failure, probably due to pesticide contamination of its food sources, and habitat losses have been the chief causes for the eagle's decline and present status. The reintroduction of the bald eagle to the northern Channel Islands is planned for the future. In addition, Santa Catalina is also being considered for eagle hacking within the near future.

Successful reintroduction of bald eagles to their former nesting range in California will result in the increased numbers utilizing coastal areas.

The potential impacts to the eagle from proposed oil and gas exploration and development/production activities are disturbance to its nesting areas resulting from onshore activities and the possibility of an oil spill reaching the coast and subsequently oiling the eagles and/or contaminating the food source. Oiled eagles returning to the nest to incubate could contaminate the eggs or nestlings. Toxicological studies have indicated that even small amounts of oil applied to an egg are toxic to the embryo.

Recent information indicates that bald eagles may be wintering on the Channel Islands. Since no onshore development is proposed for the Islands, the impacts from an oil spill to wintering eagles would be limited to the contamination of the eagle's food source or feather contamination of individual eagles.

However, the present concentrations of California's eagle population are located along inland lakes and rivers, and are removed from the impacts of coastal oil and gas development activities.

American Peregrine Falcon (Falco peregrinus anatum)

The American peregrine was listed as Endangered on June 2 and October 13, 1970, and a portion of the peregrine's Critical Habitat was designated in the August 11, 1977, Federal Register. This subspecies once occurred widely through much of North America from southern Alaska and Canada, to northern Mexico. This peregrine is migratory in the northern portion of its breeding range, but exhibits less migratory behavior toward the southern portion of its range. In California, the species once occurred throughout the State where cliff faces and steep rocky slopes provided suitable nesting locations. The mountains, sea coast, and Channel Islands historically harbored significant populations.

The species has suffered a drastic decline throughout its range primarily due to reproductive failure resulting from pesticide contamination of its avian prey. Currently, less than fifty known pairs remain in California and the species has been extirpated from the Channel Islands.

Several historic eyries are located along the coast from Point Conception south to the Mexican border. At present, however, only one active nest site, located west of Santa Barbara, exists along this reach of the coast. Considerable effort is currently being expended toward recovery of this species, chiefly through captive propagation and reintroduction. The Channel Islands include several sites where reintroduction efforts may eventually be made. Natural expansion of American peregrines is anticipated with the decreased usage of residual pesticides.

The falcons prey heavily upon coastal birds. The potential impacts on the American peregrine falcon from oil and gas exploration and development/production activities are identical to those on the bald eagle.

At this time, there are no proposals for new onshore facilities along the Southern California coast, particularly in the vicinity of Point Conception. Should additional facilities be proposed, GS must reinitiate Section 7 consultation. The Oilspill Risk Analysis, prepared by GS for the Southern California (Proposed Sale 48) Outer Continental Shelf Lease Area, arbitrarily divides the California coast into segments and projects the probability of oil impacting these segments from various offshore lease locations. According to this analysis, the probability of an OCS related oil spill reaching the vicinity of the one active peregrine nest is less than ten percent. Since the Critical Habitat is outside of the area considered in this consultation, that habitat will not be destroyed or adversely modified by the proposal.

Transient American peregrines may be found in small numbers along the coast, especially during migration and winter periods. We recommend that the majority of the estuaries, bays, lagoons, and rivers have available cleanup equipment to close off these areas within two hours of a spill occurrence. This action would minimize the impact of the oil, should it reach the shore.

Southern Sea Otter (Enhydra lutris nereis)

The southern sea otter was listed in the Federal Register as Threatened on January 14, 1977. Critical Habitat has not yet been determined for this species.

Historically, the southern sea otter was found in relative abundance along the California coast. The principal population decreases resulted from commercial harvest by fur traders during the 1800's, and the population was brought to near extinction at the turn of the century.

In 1938, the southern sea otter was identified off Point Sur, California and that population has expanded to an estimated high of 1,856 individuals (1976 census) with a range between Point San Luis (San Luis Obispo County) to Ano Nuevo Point (Santa Cruz County). A few wandering individuals have been sighted to the north and south of these range limits. Provided the population continues to increase at the current census rate, it is presumed that the population will extend its range to the Channel Islands and mainland south of Point Conception. Because the area considered in this consultation is part of the southern sea otter's historical range, it will be considered in this consultation.

The southern sea otter is an opportunistic predator which forages in both the rocky and soft sediment communities, seldom ranging beyond the 20-30 fathom depth curve.

An oil spill could affect sea otters in several ways. When trying to determine these effects, the physical configuration and the amount of oil on the surface of the water must be considered. The oil is influenced by environmental factors including wind, waves, temperature, suspended sediments, and time. Direct contact with oil would mat the coat and decrease the otter's natural insulation against temperature loss. Constant preening to maintain the insulating quality of the coat would result in the direct ingestion of some petroleum products. As stated in the DES for Sale No. 48, "Accidental exposure of two sea otters to a small but unknown amount of oil (probably diesel) in an experimental holding pool on Amchitka Island resulted in fur matting, progressively severe distress, emergence from the water, and death by exposure within several hours" (K.W. Kenyon, unpublished data). "The oil in this case formed a visible sheen comparable to that sometimes present in harbor areas where gulls appear unaffected by it."

The sea otter feeds on benthic organisms such as abalone, pismo clams, and urchins.

There are natural factors which affect the persistence of oil such as dilution, evaporation, photo-oxidation, sedimentation by adsorption on suspended particles and microbial degradation. Because of these factors, it makes it difficult to determine the effects of oil on benthic communities. Oil which settles to the bottom, depending upon the factors identified above, could kill benthic organisms by smothering the organisms or from its toxic effects.

In the event of an oil spill, another major effect on otters would be the local loss of food sources. The secondary effect would be the long term contamination of shellfish populations which may also result in the ingestion of petroleum products by the sea otters.

The southern sea otter does not presently inhabit the area considered in this consultation. Should the otter move into this area during the life of these activities, GS must reinitiate Section 7 consultation to determine whether the ongoing activities are likely to jeopardize the continued existence of the sea otter.

California Brown Pelican (Pelicanus occidentalis californicus)

The California brown pelican was originally listed as Endangered on October 13, 1970. Critical Habitat has not yet been determined for this species. All subspecies of brown pelicans were listed on December 2, 1970.

The only regular breeding colonies of this subspecies in the United States are located on Anacapa Island and nearby Scorpion Rock. This nesting population is augmented from late July through early November by large numbers of pelicans which regularly disperse north from Mexican waters. These migrants are generally gone again by early December; however, it has been recently determined that some may be recruited into the Anacapa breeding population.

Pelicans rarely are found far from salt water, or farther than 20-30 miles offshore. They forage intensively in the Santa Barbara Channel. Their major food is small fishes (primarily anchovy), which they capture near the surface by plunge-diving from the air.

During the late 1960's and early 1970's, the Anacapa colony suffered catastrophic nesting failure induced by DDT and its derivatives accumulating in the reproducing adults. Following the ban on this pesticide, the fledging rate has continued to fluctuate widely but has not dropped to the low numbers experienced earlier.

Pelicans may be affected by oil spills through contamination of their plumage as they dive for food or drift on the surface. This may contribute to direct mortality or result in reduced hatchability of eggs oiled from the fouled plumage of an adult bird. Individual pelicans that have been found oiled have responded well to treatment.

In accordance with the Oilspill Risk Analysis, we have identified ten segments which contain habitats important to the listed species and are susceptible to damage from oil (Attachment 4). Of these ten, Anacapa, Segment 50, has the greatest projected likelihood of being hit by oil from the greatest number of sources (Attachment 5).

It is difficult to predict from oil spill probabilities what the effects of oil activities might be on Anacapa. The only known incident of significant numbers of pelicans being oiled was after a spill from the Navy vessel Manatee in August 1973. Concentrations of light tar washed up on beaches from San Clemente south into Mexico. Twenty to 25 juvenile pelicans were found oiled. In contrast, no pelicans were reported oiled as a result of the January 1969, Santa Barbara blowout. Judging only from location of the spills, the results should have been reversed, but timing was the determinant in these cases. The San Clemente spill occurred in the late summer, when large numbers of pelicans were dispersed throughout the area; the Santa Barbara spill occurred in the winter, just following a severe storm, when relatively few pelicans were in the area and fewer still would have been far from shelter. While the breeding grounds and feeding areas surrounding Anacapa Island are extremely vulnerable locations, the San Clemente spill indicates that large amounts of oil anywhere within the pelicans' range could cause significant damage at the wrong time of year.

No pelican losses from OCS activities off Southern California have been reported to date, nor from nearby activities in the State tidelands. Additional threat from OCS Sale 48 has been considerably reduced by the withdrawal of tracts that were close to Anacapa.

To assist GS in carrying out their responsibility for the conservation of the listed species, the following recommendations are given.

From Attachment 5, the following tracts, transportation routes, and pipeline routes indicate a high probability of an oil spill contacting Anacapa Island. Tracts leased before Sale No. 48: 166, 202, 203, 204, 205, 208, 210, 215, 216, 217, 233, 234, 240, and 241. Tracts leased in Sale No. 48: 337, 346, 347, and 361. Transportation Route: T6 and T7. Pipeline Route: L4 and L6.

We recommend that GS require the lessee to assign a high priority and prescribe specific measures for the protection of Anacapa Island in all Oil Spill Contingency Plans submitted to GS for exploration or development/production within the above listed tracts, and for activities that might result in substantially increased tanker traffic over the identified transportation routes.

In accordance with OCS Operating Order No. 7, the proper authorities must be notified in the event of an oil spill occurrence. We would like to insure maximum protection to Anacapa Island by further recommending that GS require the oil spill containment equipment, which is maintained on the individual platforms, also be required to respond to a spill from another platform in the area.

California Least Tern (Sterna albifrons browni)

The California least tern was listed as Endangered in the Federal Register on October 13, 1970. Critical Habitat has not yet been designated for this subspecies.

The least tern migrates from Mexico each spring to establish breeding colonies on the California coast. It occupies coastal habitats from the Pacific coast of Baja California to the San Francisco Bay from April to September.

The least tern usually chooses a nesting location in an open expanse of sand, dirt, or dried mud close to a lagoon or estuary where food can be obtained. Prey consists of small fish such as the northern anchovy (Engraulis mordax), deepbody anchovy (Anchoa compressa), jacksmelt (Atherinopsis californiensis), topsmelt (Atherinops affinis), California grunion (Leuresthes tenuis), shiner surfperch (Cyrtogaster aggregata), California killifish (Fundulus parvipinnis), and mosquitofish (Gambusia affinis). The reduction in numbers of least terns has resulted from the loss of feeding and nesting habitats and disruption of nest sites by human-associated activities.

Potential threats to the California least tern from oil and gas activities are related to oil spills and increased human activities in coastal areas where nesting colonies occur. The birds could be contaminated by a spill as they dive for food. This may contribute to direct mortality or result in reduced hatchability of eggs oiled from the fouled plumage of an adult bird. Oil spills cause severe damage when they enter coastal wetlands, and could destroy essential feeding areas for the terns.

To assist GS in implementing its responsibility for the conservation of the species, the following recommendation is given. GS should require that the Oil Spill Contingency Plans include provisions for the deployment of adequate containment equipment into the areas listed below to prevent the entry of an advancing oil spill. The necessary equipment must be onsite, within two hours, on any of these areas that are threatened by a spill.

The areas identified in the Recovery Plan as essential habitat for least terns are: Mission Bay; Sweetwater Marsh Complex; Tijuana River Estuary; South San Diego Bay; North San Diego Bay; Los Penasquitos Lagoon; San Dieguito Lagoon; San Elijo Lagoon; Batiquitos Lagoon; Agua Hedionda Lagoon; Buena Vista Lagoon; Santa Margarita River; Santa Ana River; Anahiem Bay/Huntington Harbor; San Gabriel River/Alamitos Bay; Harbor Lake; Terminal Island; Playa del Rey; Mugu Lagoon; and Ormond Beach (Attachment 4).

Light-footed Clapper Rail (Rallus longirostris levipes)

The light-footed clapper rail was listed as Endangered on October 13, 1970. Critical Habitat has not yet been designated for this subspecies. Histori-

cally, the clapper rail's range extended from Santa Barbara County, California, to San Quintin Bay, Baja California, Mexico. Currently, this subspecies probably occurs in 16 California marshes and at least two marshes in Baja California. Distribution is along approximately 200 miles of United States coastline from Goleta Slough in Santa Barbara County south to the Tijuana Estuary in San Diego County.

Food consists of various invertebrates (crustaceans, mollusks and annelids) found in tidal coastal marshes. Past decline of the species has been attributed to the loss of over 65 percent of its former habitat as well as overhunting prior to 1939.

Potential threats from oil and gas activities could be from oil spills and increased human activities in the estuaries where existing populations live. The population estimate of 1976 suggested a total population of 250 birds distributed throughout 16 locations in California. Of these, five are in public ownership and may contain over 40 percent of the estimated population in California. Through the efforts of the Light-Footed Clapper Rail Recovery Team, a plan to stabilize this species through land acquisition and marsh management has been approved.

According to the Oilspill Risk Analysis, the possibility of an oil spill hitting clapper rail habitat is low. In addition, with the use of existing onshore facilities, no increased human disturbance from these activities is likely.

In order to assist GS in carrying out its responsibility to conserve the species, it is recommended that GS require the lessee to deploy the required containment equipment onto those areas identified in the Draft Recovery Plan as essential clapper rail habitat (Attachment 4). The necessary equipment should be onsite within two hours of an oil spill to prevent the entry of any advancing spill. Those areas to be included in the Oil Spill Contingency Plans for exploration and development/production are: Mission Bay; Sweetwater River complex; Tijuana River Estuary; South San Diego Bay; San Diego River mouth; Los Penasquitos Lagoon; upper Newport Bay; Anaheim Bay; Mugu Lagoon area; Carpinteria Marsh; and Goleta Slough.

Salt Marsh Bird's Beak (Cordylanthus maritimus ssp. maritimus)

Salt marsh bird's beak is an annual herb (15-30 cm high) with purple flowers, that inhabits the upper elevations of tidal salt marshes. Populations of bird's beak are associated with pickleweed (Salicornia) and salt grass (Distichlis) near elevations at and above high tide. The bird's beak was listed as Endangered in the Federal Register on September 28, 1978. Critical Habitat has not yet been determined for C. m. maritimus.

Historically, this subspecies occurred from Carpinteria in Santa Barbara County south to San Diego County and northern Baja California, Mexico.

Today, distribution is restricted to the Sandyland Marsh (Carpinteria) in Santa Barbara County, Point Mugu in Ventura County, and the Tijuana River Estuary in San Diego County.

Destruction of coastal salt marshes is the major factor responsible for the elimination of this wetland species.

The Carpinteria Marsh area and the Tijuana River Estuary are in public ownership; and since existing onshore facilities will be utilized, the potential for further destruction of the bird's beaks' existing habitat from CCS activities has been reduced. The probability of an oil spill reaching this species' habitat is minimal.

Although the remaining populations of the salt marsh bird's beak are located inside protected estuaries and along the upper elevations of tidal salt marshes, the potential for inundation by an CCS related oil spill still exists.

In order to assist GS in carrying out their responsibility to conserve the listed species, it is recommended that GS require the necessary containment equipment be deployed to those three areas identified above within two hours of an oil spill. This requirement should be a part of the Oil Spill Contingency Plan for each exploration and development/production plan.

Development Plans

This consultation includes three existing development activities and four proposed development plans. A discussion of these development tracts follows:

The three existing development tracts are located in the Santa Barbara Channel (tracts 166, 240, and 241). The proposed development plans for tracts 188, 202, and 217 are also located in the Santa Barbara Channel. The remaining development plan (tract 300) is located south of Long Beach.

There are two platforms on tract 166—Hogan and Houchin—located five miles south of Carpinteria. These platforms are sending 4,600 barrels of oil per day via pipeline to existing facilities at La Conchita. Crew boats make two or three round trips a day from existing facilities at Carpinteria.

Another tract under development, tract 241, has three platforms sending 20,024 barrels of oil per day via existing pipeline to the Rincon facilities. These platforms require two to three crew boat trips a day from Carpinteria.

The third producing tract is tract 240, containing platform Hillhouse. This tract is located ten miles south of Summerland. The platform is serviced by two or three crew boats a day from Carpinteria. The 7,752 barrels of oil per day is transported by connecting pipeline to the tract 241 pipeline which goes to the Rincon facilities.

There are four proposed development plans being considered in this consultation. The first is a proposal for tract 217 for platform Grace. The estimated production is 16,000 barrels of oil per day by 1982. The tract is located 12 miles south-southwest of Rincon. It is proposed to connect this platform to the State platform Hope via pipeline, then to Carpinteria via existing pipeline. An additional pipeline proposal associated with this platform, is a 5.8 mile overland pipeline from Carpinteria south to Ventura. This pipeline is south of Carpinteria Marsh.

Tract 188 is located five miles south of Refugio Cove and platform Hondo will be placed on the tract. It is estimated that a production rate of 60,000 barrels of oil per day will be produced by 1982. The oil will be transported by pipeline to an offshore storage and transport (OS&T) vessel. This OS&T vessel will be located within the same tract. It is anticipated that two to three crew boat trips per day will originate from Carpinteria and two helicopter trips per week out of Ventura or Santa Barbara will be servicing this platform. From the OS&T vessel the oil will be tankered to an existing onshore facility.

Platform Girty is proposed for tract 202, located four miles southwest of Oxnard. Oil production is estimated to be 6,000 barrels per day and will travel via pipeline to a proposed onshore facility south of McGrath Lake at Ventura. It is estimated that three boat trips a day and three to four helicopter trips a month from Ventura will be needed to service this platform. From the proposed facility in Ventura, the oil will go to the Carpinteria facilities and then to Rincon facilities. There are two proposed onshore pipeline routes from Carpinteria to Rincon—one directly to Rincon, the other from Carpinteria to Rincon via La Conchita.

The fourth proposed development plan is located on tract 300, seven miles south of Long Beach. There will be two platforms on this tract, Ellen and Elly, with an estimated production rate of 16,000 barrels of oil per day by 1982. A proposed pipeline will connect these platforms to Long Beach refinery facilities. Three to four crew boats a day and two helicopter trips per week from Huntington Beach are anticipated to serve this tract. There is a proposal to place a platform, Eureka, on the adjacent tract, number 301. This platform will be joined to those on 300 by pipeline.

The four proposed development plans (tracts 188, 202, 217, and 300) specifically address the proposed pipeline routes and the onshore facilities to be used. We have reviewed the proposals and believe that the proposed pipeline routes and the construction of the onshore facility are not likely to jeopardize the continued existence of the listed species or destroy or adversely modify the Critical Habitat of the American peregrine falcon. However, Section 7 consultation must be reinitiated should any of the following occur which may affect listed species or their Critical Habitats: (1) alternative pipeline route be planned; (2) the construction of additional onshore facilities; (3) a change in the use pattern be conducted at the onshore facilities mentioned above; or (4) a new species be listed.

Cumulative Effects

There are numerous offshore and coastal projects and activities in Southern California. Those known to the Office of Endangered Species which could have an impact on the Endangered and Threatened species are considered in this consultation.

The Standard Oil Company of Ohio (SOHIO) pipeline project proposes to transport Alaskan crude oil from Valdez, Alaska to a new (unconstructed) unloading facility at Long Beach, California by tanker. Fourteen tankers will be required, each making 23 round trips per year, to transport the oil. From Long Beach, 500,000 barrels of oil per day will be transported by pipeline to Midland, Texas.

Additional increases in tankers carrying oil out of California can be attributed to the Naval Petroleum Production Act transporting oil from Elk Hills in the San Joaquin Valley to Port Hueneme via pipeline. It is proposed that 350,000 barrels of crude oil a day be sold to any interested party, which makes it difficult to predict the transport routes. However, it could possibly go to the Los Angeles/Long Beach area or even to the east coast traveling through the Panama Canal.

The Chanslor-Western Oil and Development Company has proposed to explore the Vaca Tar Sands. Because the oil would be extremely viscous, an oil processing plant or coking facility would probably be needed at the project site before being shipped by pipeline.

Additional vessel traffic can be expected in the San Pedro and Santa Barbara Channels from the Space Shuttle program.

There are two nuclear power plant proposals. The first, at Diablo Canyon in San Luis Obispo County, has been constructed, but start-up has not been granted. The second plant is in operation but has proposed to expand the facilities. This one is located at San Onofre, Orange County.

There are several Liquefied Natural Gas (LNG) facilities proposed for Southern California. None have received approval yet. The onshore LNG plant would be at Point Conception and the offshore sites being considered are: Beachers Bay; Chinese Harbor; San Pedro Point; Smugglers Cove; East Channel Shelf; and Camp Pendleton. If the onshore LNG facility at Point Conception is approved, it will be processing gas from Alaska (400 million cubic feet a day) and from Indonesia (500 million cubic feet a day). This would increase tanker traffic (190 trips a year) into Point Conception.

The Office of Coastal Zone Management (OCZM) has proposed a marine sanctuary be designated around the northern Channel Islands and Santa Barbara Island which would exclude oil and gas activities within six nautical miles of the islands. Concurrently, the CCS Sale No. 48 excluded those tracts within six nautical miles of the Channel Islands and Santa Barbara Island.

The State of California leases tracts within three nautical miles of the coast. These activities generate the placement of pipelines, increased crew boats/supply boats and helicopters servicing the rigs, possible construction of additional processing facilities, and increased tankering.

There are several U.S. Army Corps of Engineers projects in the area including maintenance dredging, beach erosion, and harbor deepening projects.

All of the above projects potentially increase the disturbance to Endangered and Threatened species' habitat and/or increase the possibility of an oil spill occurring within the Southern California area considered in this consultation.

An individual project or activity may have no significant impact upon the listed species, but when considered in light of the numerous projects within the same area, significant impacts could occur.

With accelerated offshore oil and gas activities, the probable risk of oil spills also increases. Additional oil spillage could increase the impacts to Endangered and Threatened species. Due to this, immediate oil spill containment response is extremely necessary.

An increase in onshore activities presents another possible impact to the listed species. There are numerous coastal activities in this area. Due to the stress on the coastal area, changes in OCS related onshore activities must be evaluated carefully.

Conclusion

This biological opinion covers the oil and gas exploration activities for those tracts leased prior to OCS Sale 35, and those leased in OCS Sale 35 and 48. It also covers the seven development tracts identified above.

We have rendered our conservation recommendations for the protection of the El Segundo blue butterfly, the California brown pelican, the California least tern, the light-footed clapper rail, and the salt marsh bird's beak. Any activity or program authorized, funded, or carried out by a Federal agency which may affect any listed species or its Critical Habitat, will require Section 7 consultation.

The GS is reminded of their continuing responsibility to review their activities in light of their Section 7 obligations. Should additional onshore facilities be proposed, or the use pattern of existing facilities be changed, or a new species be listed that may be affected by exploration activities, Section 7 consultation must be initiated if a "may affect" determination is made. Also, should the construction of additional onshore facilities be proposed, different pipeline routes be proposed, a change in

the use pattern of the existing onshore facilities be proposed, or a new species be listed which may be affected by the development plans contained in this consultation, Section 7 consultation must be reinitiated.

GS must review all development/production plans not covered by this consultation in light of Section 7(c) of the Endangered Species Act of 1973, as amended.

We would like to thank GS for their consideration in providing the necessary information needed to conduct this consultation.

A handwritten signature in black ink, appearing to read "Robert S. Cook". The signature is written in a cursive style with a large, sweeping initial "R".

Robert S. Cook

Attachments (5)

[Habitat]

APPENDIX 2

CULTURAL RESOURCE SURVEYS

Correspondence:

Heritage Conservation and Recreation Service, Memorandum of November 21, 1979.

Also see in Appendix 1:

Bureau of Land Management, Memorandum of November 23, 1979.



United States Department of the Interior

HERITAGE CONSERVATION AND RECREATION SERVICE
PACIFIC SOUTHWEST REGION
SAN FRANCISCO, CALIFORNIA 94102

DUNAWAY
NOTED - DUNAWAY

NOTED - ADAMS

IN REPLY REFER TO:
PSW 200

NOV 21 1979



MEMORANDUM

To: Oil and Gas Supervisor, Pacific Area

From: Regional Director, PSWRO, HCRS

Subject: S.O. 2974 Review, Plan of Development, Pitas Point Unit,
OCS Leases P0233, P0234 and P0346, Texaco Inc.

Thank you for the opportunity to comment on the proposed project. Our concerns center on the proposed pipeline route and on-shore construction associated with the offshore platform. The following comments are offered for your perusal:

Local Coastal Plan

Conformance of the proposed project with the Local Coastal Plan (LCP) for the Santa Barbara area (now being prepared by local and county planning agencies for State Coastal Commission approval) should be established. The appropriate local agencies should be contacted.

Proposed Pipeline Routes

Enclosed please find a description and map of the Carpinteria Asphalt Deposits. This site has been proposed for National Natural Landmark designation. Construction of the proposed desired pipeline alternative may directly impact the State Beach and the Landmark Site. No reference to Carpinteria State Beach in relation to proposed pipeline route number 1 was found in the Environmental Report of September 1979. Figure 2-10 fails to portray the information described on page 2-22. Further this agency suggests that alternative pipeline routes 2 or 3 would be preferable to route 1 (figure VII-A Pitas Point Development Plan). Construction of the pipeline onshore would require disruption of the beach environment. Archeological and historical resources onshore may be impacted by the pipeline and metering station construction. Mitigation measures for the protection or preservation of cultural resources should be developed.

Thank you again for the opportunity to comment. If you have any questions, please do not hesitate to contact us at (415)556-2480.

Attachment

NATURAL LANDMARKS BRIEF

1. Site: Carpinteria Asphalt Deposits and Tar Pits, Santa Barbara County, California.

2. Description: This site is located within Carpinteria State Beach, south of Sandyland Cove and adjacent to the town of Carpinteria. In this area, large deposits of tarry asphaltum have been extruded from the underlying highly folded Miocene Monterey shales and are now included in the sand and gravel of the low marine terraces and beach cliffs along the coastal strip. Many of the tar seeps are still active, although the flow from the seeps is quite slow. These seeps flow onto the beach, saturating the beach sand and flow onward into the sea. The tar cements seaweed, pebbles and rocks into a firm conglomerate, thus forming present day "fossils". The rocks throughout the coastal strip are highly impregnated with crude oil and most are stained dark brown.

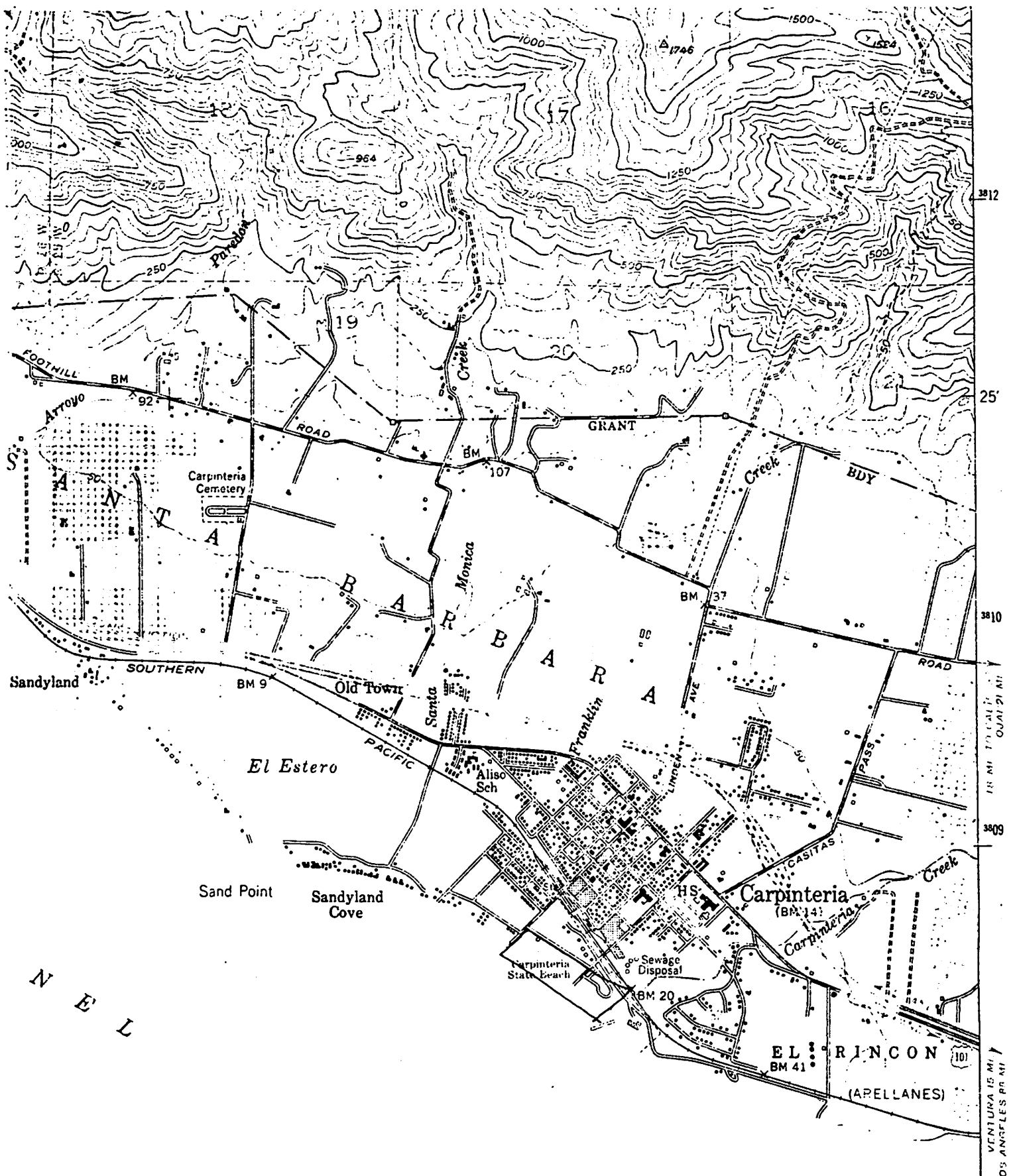
Abundant fossil remains of terrestrial plants, mammals, birds, insects and marine invertebrates, all of the Pleistocene age, have been found associated with the asphalt deposits. Among the over 57 species of birds found here are the California condor and the California jay. Typical mammal remains include horse, coyote, bison and jackrabbit.

3. Owner: California Department of Parks and Recreation.

4. Proposed By: Lipps, Jere H., James R. Correa and Gary Zumwalt, Inventory of Significant Geological, Fossil and Marine Sites and Features in the South Pacific Border Region, California.

5. Significance: The Carpinteria asphalt deposits contain a unique paleontologic record of terrestrial plants, mammals, birds, insects, marine plants and marine invertebrates of the Pleistocene. Although fossil plants are rare at other California tar pit sites, at Carpinteria the fossil flora includes 25 species representing 18 families. The record of marine life here is also rather unique.

From the standpoint of showing a sample of terrestrial and marine flora and fauna of the same geologic age, this site is unrivalled. The Carpinteria deposits are second only to those at La Brea in their importance in deciphering the environmental conditions and biota of Southern California during the Pleistocene. Typical fossil plant species such as coast redwood (Sequoia sempervirens), Bishop pine (Pinus muricata), Monterey pine (P. radiata), coast live oak (Quercus agrifolia) and manzanita (Arctostaphylos spp.) indicate that during fossil accumulation the climate was cooler and more humid. The preponderance of carnivores over herbivores in the faunal remains suggests that food or water attracted animals to this site.



CARPINTERIA, CALIF.
N3422.5—W119307.5

1952

AMS 2052 I NE—SERIES V895



3812
25'
3810
3809
IN METRIC QUANTITIES
34°22'
LOS ANGELES BE ME
34°22'
119°30'

Dunaway

UNITED STATES GOVERNMENT

memorandum

DATE: NOV 23 1979

GEOLOGICAL SURVEY
RECEIVED
NOV 23 1979
LOS ANGELES

REPLY TO
ATTN OF: Manager, Pacific OCS Office

1780.11
OCS-P 0233
0234
0346

SUBJECT: Plan of Development, Pitas Point Unit, OCS Leases P 0233,
P 0234, and P 0346, Texaco Inc.

TO: Oil and Gas Supervisor, Pacific Area

NOTED - DUNAWAY

We have reviewed Texaco's Development Plan and Environmental Report, and our comments are:

1. There are no legal conflicts nor encumbrances; Texaco is properly designated as the unit operator.
2. Comment on cultural resources:

NOTED - ADAMS

We recommend that the proposed and alternate nos. 1 and 2 pipeline routes be surveyed for potential cultural resources. These pipeline routes are within zones of high sensitivity for shipwrecks and aboriginal sites.

3. Comment on biological resources:

We recommend a bottom grab biological survey at the proposed pipeline route.

The impacts of pipeline installation on dense populations of the tongue worm are unknown, but would probably cause an extreme population decrease in the population reported to be in excess of 1,000 g/m². Temporary disruption of pipeline placement may break the balance that holds the dense populations together. A further inhibitant to the dense populations could be the alteration of the soft bottom caused by pipelines. Since the impact and importance of these dense populations is so little known, it would be best to avoid dense populations of over 1000 g/m² wet weight.

4. Comments on Environmental Report (ER):

P.3-23

The following statement needs clarification: "No anomalies [Indicative?] of cultural or archaeological resources are known to exist in the area of the proposed action."

"Several sources of information relating to past culture...have been consulted". No such sources of information are included in "Sources of Reference" section nor is there any evidence of a cultural resource assessment. The



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(REV. 7-78)
GSA FPMR (41 CFR) 101-11.6
5010-112

source of information should be included in Appendix "A", Source of Reference. Also a cultural resource assessment should be conducted and appended to the ER.

P.3-28

The statement in the ER that nothing is known of the biotic conditions of the platform site or pipeline route is not true. The proposed construction sites would be within the area reported by the Allan Hancock Foundation (1965) as being the only area permanently occupied by large populations of the tongue worm Listriolobus pelodes.

The tongue worm Listriolobus pelodes is an infaunal species which contributes significantly to the diet of several, larger bottom associated organisms. Dietary information has not been collected for many species which feed on the bottom but such studies would probably find that the worm is an important food source for a wider variety of animals than is now known, particularly in the Santa Barbara area. This area is an extremely important bottom fish fishery area with the bottom feeding English sole comprising the majority of the catch. Species which have been reported to have gut contents consisting almost exclusively of Listriolobus pelodes are the Dover sole and the large opisthobranch molluscan Pheurobranchoea californica.

These tongue worms have also been found to be an indicator of organic pollution in fine silty bottoms (Los Angeles Sanitation Districts, 1976). Its population can expand to the carrying capacity of these environments in less than a year and quickly be reduced to small to moderate "normal" population levels (Bruce Tompson, personal communication, 1978). This characteristic allows this species to have value in future pollution indication studies.

As far as has been determined the only area within the southern California Bight that this species maintains relatively constant high population levels is within the fine sediments on the shelf south east of Santa Barbara. Even in this area populations may fluctuate significantly, ranging from 100gm/m² (Fauchald, 1971) to as high as 2,000 gm/m² (Allen Hancock, 1965). The maximum density of these populations may have stabilized at approximately 800g/m² for a period in the early 1970's (Pilger, personal communication, 1977), but more recent evidence suggests that the population is significantly below that at certain areas in the eastern part of the original dense area.

5. Texaco is proposing three alternative pipeline routes to transfer gas production to shore (Plan of Development, Section VIII). The preferred pipeline route from the platform Carpenteria would be installed and operated by Pacific Offshore Pipeline Company (POPCO). If this alternative is selected POPCO would be required to apply to this office for a BLM right-of-way for the pipeline. The application would have to be in accordance with the rules and regulations as outlined in the 43 CFR Subpart 3340 - Grants of Pipeline Rights-of-Way in the Outer Continental Shelf. It is important that the company be notified of this possible additional requirement.

We cannot recommend approval of Texaco's Plan of Development and Environmental Report until Texaco responds satisfactorily to our above comments on biological and cultural resources survey concerning pipeline routes, and on the Environmental Report.

We are returning the following information:

1. Texaco Inc - Operator. 1979. Pitas Point Unit Development and Production Plan. September. For U.S. Government use only.
2. Fairfield Industries. 1979. Engineering Geophysical Report Santa Barbara Channel (OCS -P 0234, Block 50N-64W) Offshore California. Texaco, Inc. May. For U.S. Government use only.

Enclosures

William E. Grant

APPENDIX 3

CONTINGENCY PLANS

Texaco, Inc. submitted the latest revision of the Oil Spill Cleanup Manual for offshore California on March 30, 1981. It is available for public information at the USGS Pacific OCS Region office in Los Angeles. The Pitas Point Unit site specific details (phone numbers, command post locations, onsite equipment inventory, cleanup organizations and their inventories, and response times) are given in Appendix BB. The equipment inventory will be updated when equipment is installed onsite.

[Habitat]

APPENDIX 4

MAPS, DIAGRAMS, PHOTOGRAPHS

See EA/EIR text:

List of Illustrations, pp. xi and xii.
Appendices B through G.

[Habitat]

APPENDIX 5

PROPOSED PLAN OF DEVELOPMENT AND ENVIRONMENTAL REPORT

Available for inspection under separate cover:

Texaco, Inc., September 1979, Pitas Point Unit, Plan of Development.

Texaco, Inc., September 1979, Environmental Report Development-Production, Pitas Point Platform and Subsea Pipeline, OCS Leases P 0233, P 0234, and P 0346; prepared by Robert Dundas Associates.

[Habitat]

APPENDIX 6

U. S. GEOLOGICAL SURVEY REPORTS

See EA/EIR Appendix G:

U. S. Geological Survey Materials

APPENDIX 7

REVIEW COMMENTS AND CORRESPONDENCE FROM OTHER AGENCIES AND THE PUBLIC

Notation: The review comments and correspondence in this Appendix are on the Operator (Texaco, Inc.) submitted Proposed Plan of Development and Environmental Report. Written and Public Hearing comments on the Draft EA/EIR are reproduced and responded to in the Final EA/EIR, April 1981, Appendix A.

National Park Service, Memorandum of October 17, 1979.

U. S. Coast Guard, Letter of November 6, 1979.

Appendix 1 contains:

U. S. Fish and Wildlife Service, Memorandum of October 22, 1979.

National Marine Fisheries Service, Letter of October 15, 1979.

Bureau of Land Management, Memorandum of November 23, 1979.

Appendix 2 contains:

Heritage Conservation and Recreation Service, Memorandum of November 21, 1979.

(Review copies of the Plan of Development and Environmental Report were sent by certified mail, return receipt requested, to: California Governor's Office of Planning and Research, U. S. Office of Coastal Zone Management, and the Environmental Protection Agency. Records indicate that the documents were received; however these agencies chose not to reply the time.)

~~Dunaway~~
10/17/79



United States Department of the Interior

NATIONAL PARK SERVICE

WESTERN REGION

450 GOLDEN GATE AVENUE, BOX 36063
SAN FRANCISCO, CALIFORNIA 94102

IN REPLY REFER TO:

L7619
(WR)REQ

GEOLO
RECEIVED
October 17, 1979
OCT 22 1979
LOS ANGELES

NOTED - SCHMIDTOK

NOTED - DUNAWAY

Memorandum

To: Oil and Gas Supervisor, Pacific Area, U.S. Geological Survey
From: Associate Regional Director, Resource Management and Planning
Western Region
Subject: S.O. 2974 Review, Plan of Development, Pitas Point Unit, OCS
Lease P 0233, P 0234 and P 0346, Texaco Inc.

We have reviewed the Texaco Inc. Plan of Development and accompanying Environmental Report for the Pitas Point Unit Area. We understand the development of the offshore natural gas field is scheduled to begin in 1981.

Our primary concern is the prevention of any adverse environmental impact on the nationally significant resource of Channel Islands National Monument and its visitor center in the Ventura Marina. The monument, with the inclusion of the islands of Santa Cruz, Santa Rosa and San Miguel, is currently proposed for national park status. In addition, our interests in the establishment of a marine sanctuary in this area closely relate to those of the Fish and Wildlife Service.

This project is unlikely to have any direct adverse impact on our areas of jurisdiction, and since the technical discussions concerning the production and transportation of the product are outside our areas of expertise, we offer no further comment.

Prue M. Nilgen

cc: Superintendent, Channel Islands National Monument



DUNAWAY



DEPARTMENT OF TRANSPORTATION
UNITED STATES COAST GUARD

MAILING ADDRESS:
COMMANDER (MOCB)
ELEVENTH COAST GUARD DISTRICT
UNION BANK BLDG.
400 OCEANGATE
LONG BEACH, CA. 90822

16213/31
6 November 1979



U. S. Department of the Interior
Geological Survey
160 Federal Building
1340 W. Sixth Street, Room 160
Los Angeles, CA 90017

NOTED - DUNAWAY

NOTED - SCHAMBECK

NOTED - ADAMS

Ref: Plan of Development, Pitas Point
Unit, OCS Leases P 0233, P 0234
and P 0346, Texaco Inc.

Dear Mr. Schambeck:

In response to your letter of 4 October 1979, the referenced Plan of Development and accompanying Environmental Report have been reviewed. Subject to our comments herein, the Coast Guard has no objections to the proposed development of the Pitas Point Unit.

The proposed pipeline installation may pass in close proximity to the offshore tanker moorings at Carpinteria. This matter should be addressed and if a conflict exists, consideration should be given to rerouting of the pipeline a safe distance from the moorings.

You are reminded of the standard regulations of this agency which will apply to this installation; such as 33 CFR 67 for Aids to Navigation Requirements for Class "A" structures and 33 CFR Parts 140-147 for requirements with respect to safety equipment and other matters relating to the promotion of safety of life and property on fixed structures located on the OCS. It is also recommended that the structure be painted white and/or yellow to enhance visibility to vessel traffic during periods of low visibility.

If you have any questions concerning these or any other matters related to this Development Plan you may contact this office at (213) 590-2301 or the above address.

Thank you for the opportunity to comment on these documents.

Sincerely,

D. M. TAUB

Captain, U. S. Coast Guard
Chief, Marine Safety Division
Eleventh Coast Guard District
By direction of the District Commander