



NOTIFICATION OF COMMISSION ACTION
ON CONSISTENCY REVIEW
FOR OCS PLANS

USGS - CONS. DIV.
PAC. OCS REGION
SEP 22 1980
RECEIVED
LOS ANGELES

CC 12-80

NOTED - DUNAWAY

FILE:
P-0325
POE

On September 16, 1980, the California Coastal Commission
date.

concurrent with Conoco, Inc.'s certification that the
name of applicant

federally-permitted activities described in the OCS Plan and listed

below comply with California's approved Coastal Management Program

and will be conducted in a manner consistent with such program.

- USGS Plan of Exploration
- USGS Permit to Drill
- USGS Permit for Pipeline Right of Way
- Environmental Protection Agency NPDES Permit
- U.S. Army Corps of Engineers Permit to Install a Pipeline
- U.S. Army Corps of Engineers Permit to Install a Platform
- U.S. Army Corps of Engineers Permit to Conduct Exploratory Drilling

Parcel 325, CC-12-80

CALIFORNIA COASTAL COMMISSION
631 Howard Street, San Francisco 94105 — (415) 543-8555

September 5, 1980



TO: STATE COMMISSIONERS

FROM: MICHAEL FISCHER, EXECUTIVE DIRECTOR

SUBJECT: Added Staff Analysis on Five OCS Plans of Exploration Before the Commission for Consistency Review (For consideration and possible action at the September 16-18 meeting.)

This is added analysis on five proposed OCS Plans of Exploration:

1. CC-8-80, Chevron USA, OCS Parcel 215 offshore Ventura
2. CC-9-80, Chevron USA, OCS Parcel 324, offshore Point Conception
3. CC-10-80, Texaco, Inc., OCS Parcel 315, offshore Point Conception
4. CC-11-80, Challenger Minerals Inc., OCS Parcel 248, south of Santa Cruz Is.
5. CC-12-80, Conoco, Inc., OCS Parcel 325, offshore Point Conception

The OCS parcel locations are shown on Exhibit 1.

Introduction. The Commission opened the public hearing on the consistency of these five POEs at the August 19-20 meeting. The Commission requested added information on these POEs. The following analysis discusses the risks of oil spills from exploratory offshore drilling and from offshore oil production activities, the equipment available to attempt to contain and cleanup a spill that might occur, the sea states at the five drilling locations, and the directions a spill might travel from each location.

Staff Recommendation. Staff continues to recommend that the Commission concur that exploratory drilling at these locations would be consistent with the California Coastal Management Program. At the August 19-20 meeting the Commission objected for the first time to a proposed POE. That POE involved locating a drillship 400 feet from the vessel traffic lane in the Channel and 5.7 miles from the breeding area of the endangered brown pelican on Anacapa Island. The State of California and the Commission have consistently opposed oil leasing and development at that location. The State and the Commission have not opposed federal leasing of the OCS parcels that are the subjects of these five POEs. These five parcels are not near marine wildlife breeding areas, although any oil spill could affect valuable marine and coastal areas. That is true for an oil spill from any location in and near the Santa Barbara Channel. If the Commission concurs with these five POEs, if petroleum is found, the Commission would have the opportunity in the future to object to oil production and transportation activities or to require state-of-the-art oil spill protection for any developments that do occur.

The Risk of Oil Spills from Exploratory Offshore Drilling. There is frequently the risk of an oil spill from offshore exploratory drilling, but that risk is very low. Since 1963 the U.S. Geological Survey in LA has approved 210 OCS exploratory wells. USGS and Coast Guard data indicate there have been no oil spills from these operations. Since 1948 there have been thousands of exploratory wells drilled on the U.S. OCS, primarily in the Gulf of Mexico. U.S.G.S. data indicate these exploratory operations have not resulted in any oil spill larger than 50 barrels. The risk of spills from exploratory drilling is low because:

- during exploration 5 to 10 percent of the wells encounter petroleum;
- the drilling of an exploratory well lasts about 60-90 days;
- during the drilling, information is recorded and analyzed, but there is no handling of large amounts of oil; and
- usually the exploratory well is sealed off and abandoned.

Since 1955 there have been 18 well blowouts from mobile offshore exploratory drilling rigs in U.S. waters. All these blowouts involved gas and not oil. According to the USGS, there has been one large oil spill from an exploratory well worldwide. That was the largest oil spill on ocean waters, the spill from the Ixtoc exploratory well in the Bahia de Campeche offshore Mexico. That well was supervised by the national Mexican oil company Pemex. Although there were differences in circumstances between the drilling and supervision of that well and the drilling and supervision of exploratory wells on the U.S. OCS, that event showed that a risk does exist.

Spills from Production Activities. The USGS has approved 313 OCS oil and gas production wells offshore California and the State Lands Commission has approved hundreds more in State waters within three miles of shore. Current offshore oil production from State tidelands is about 150,000 barrels of oil a day and from the California OCS about 20,000 b/d. The major spills on the U.S. OCS have been from production operations. The 1969 Santa Barbara Channel spill resulted from a blowout on a production well. Other major OCS spills occurred from pipeline ruptures and storage tanks ruptures in the Gulf of Mexico in 1973 and 1974. Since then the trend has been no major spills from offshore oil activities. Recently there has been a slow leak from Platform Holly in State waters in the Santa Barbara Channel.

Oil Spill Equipment Response. Section 30232 of the Coastal Act recognizes there is frequently the risk of oil spills and requires protection against the spillage of crude oil and the provision of effective containment and cleanup equipment for spills that do occur. Because the Commission has consistently found that the state-of-the-art in spill control equipment cannot effectively contain spills in high seas conditions, proposed developments that involve oil drilling on the ocean have not met this policy. The Commission has then applied Section 30260 of the Act, which in effect requires the best feasible equipment be available. Feasibility involves technical, economic and environmental considerations. The oil spill equipment involves two stages, the first line of defense at the drillship itself, and the second line of defense, which involves large equipment and trained workers deployed from staging areas onshore.

Drillship Onsite Equipment. The five POEs have the same onsite oil spill containment boom, skimmer and sorbents that the Commission has required on 15 previous POEs. The staff recommendation states that the boat for deploying the boom should be on station at all times, but can be released when wave heights exceed six feet. The containment boom effectiveness is much reduced in such waves because the oil will slop over the boom. In addition it is difficult to maintain a small boat on location in such seas.

Exhibit 2 shows the percentage of time that seas exceed 6 feet offshore Point Conception, south of Santa Cruz Island, and offshore Ventura. The annual averages range from 7 to 25 percent. In the Point Conception area the service boat could reach sheltered waters in areas east of the Point. South of the islands the boat could move to the lee of the islands, and offshore Ventura the boat could seek shelter in Port Hueneme. In most cases the boat could be back at the drillsite within 1 to 1.5 hours after the 6 foot seas subside.

Clean Seas Cooperative. The Commission has contracted for a study which is now comprehensively evaluating the capabilities of the Clean Seas Cooperative to respond to oil spills in the Channel area. This industry cooperative was formed to respond to large spills. It stores much of its equipment in large vans which can transport the equipment to areas where it is needed. Exhibit 3 shows the location of these vans and of Clean Seas' main supply base at Carpinteria.

Clean Seas would use heavy equipment, mainly booms, stored at Carpinteria and Santa Barbara to respond to a spill at tracts offshore Point Conception. Clean Seas could get added containment boom to the site in five hours, at a minimum, and the large oil recovery skimmers within about 17 hours. Time for the large skimmers to the south of Santa Cruz Island location would be about 13 hours, and to offshore Ventura about 9 hours. Because the large bottom tension oil containment boom, 8 feet in height, must be connected and launched from the beach at Mandalay, its deployment takes at least 36 to 48 hours.

The equipment is at the Eastern Channel now because that is where nearly all State and federal offshore production is at present. Clean Seas has plans to obtain quicker deployment skimmers. The cooperative's plans, the benefits of added equipment, the need for new equipment staging areas at the Western Channel if more oil is produced there, and other issues are being evaluated by the Commission's consultants. The evaluation report will be available in early 1981. Staff is not recommending that a new staging area and added equipment be provided in the Western Channel at present pending the results of this evaluation and the results of the exploratory drilling.

Oil Spill Trajectories. The most sensitive areas in the Channel to oil spill effects are the breeding areas of marine mammals and seabirds on the offshore islands. Other valuable but less sensitive areas include kelp beds, open water fishing areas, rocky intertidal coastline, and boat harbors. Any coastal area, including sandy beaches, can be damaged by oil spills for a period of time. Because of changing daily and seasonal wind patterns, circular currents, and the number of days an intact spill can stay on the water, a spill from any location in the Channel area can affect sensitive areas. Exhibit 4 reports the results of Bureau of Land Management computer simulations of oil spill paths from different locations. Under worst case assumptions, the Exhibit shows the percentage of spills from each POE area that would hit the listed islands within three days. In general spills from all locations would travel offshore. The worst cases show about a one-third chance spills from west of Point Conception would hit San Miguel Island.

Texaco
CC-10

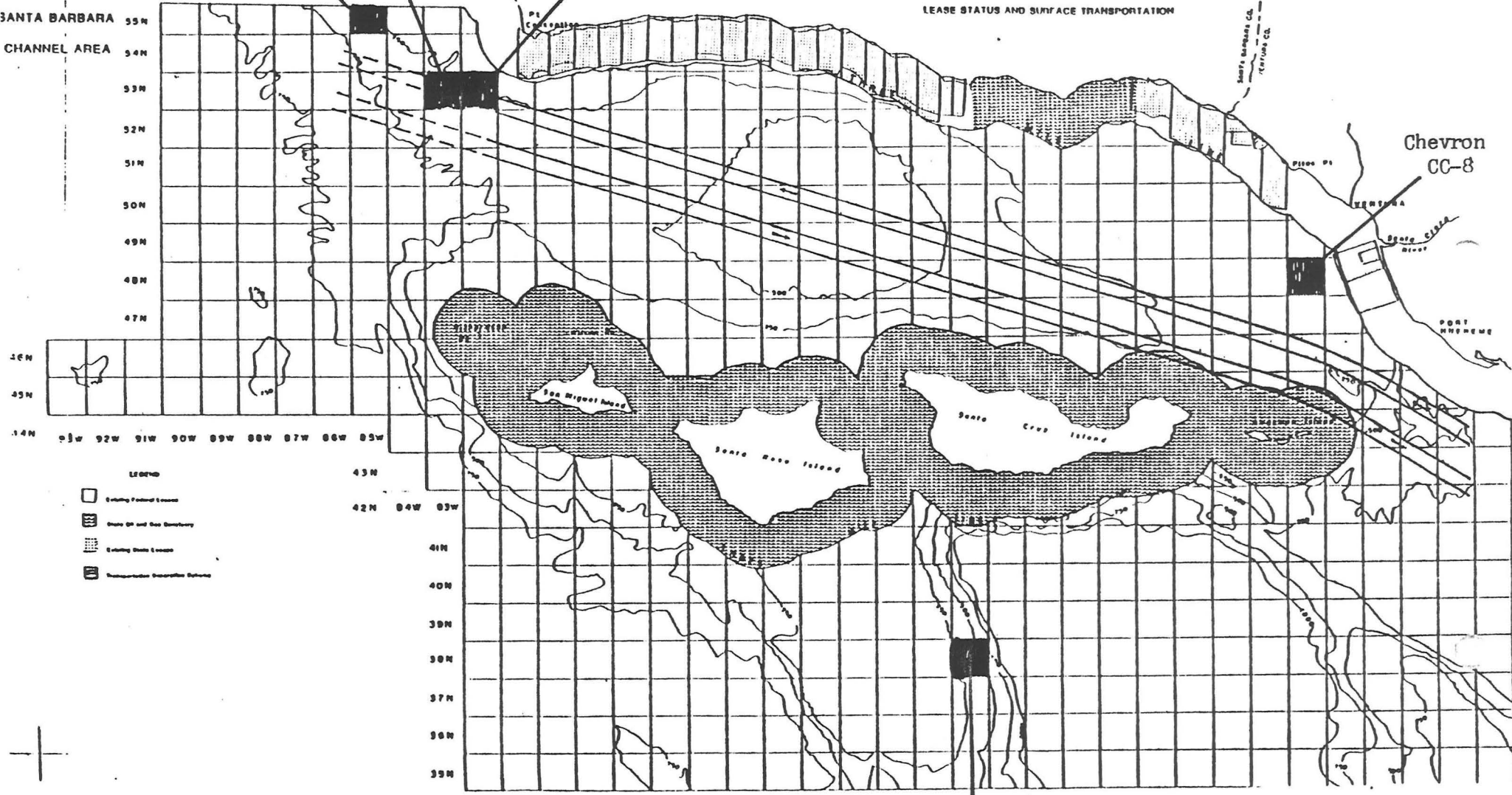
Chevron
CC-9

Conoco
CC-12

Chevron
CC-8

Challenger Minerals
CC-11

EXHIBIT 1



LOCATION		WAVE HEIGHT, PERCENT FREQUENCY OF EXCEEDANCE								WIND SPEED > 34 KTS	
		> 2'		> 6'		> 9'		> 12'		Annual Ave	Worst Best
		Annual Ave	Worst Best	Annual Ave	Worst Best	Annual Ave	Worst Best	Annual Ave	Worst Best		
CC-11-80 LEASE PARCEL 248	12 Mi. South of Santa Cruz	62	MAR/APR/MAY 90 MAY/MON/JUN 55	<u>17</u>	Apr/May 25 Aug 8	4	May 7 Many ≤ 2	1	May 3 Many ≤ 1	1	May 4 Many ≤ 1/2
CC-8-80 LEASE PARCEL 215	5 Mi. SW of Ventura	45	May 56 Oct 38	<u>7</u>	May 15 Jul-Nov 4	2	Mar 4 Many ≤ 2	1	May 2.5 All others ≤ 1	1	May 2 Many ≤ 1/2
CC-9-80 CC-12-80 LEASE PARCELS 324 & 325	SOUTH- 3-10 Mi. West of Pt. Conception	69	Apr 80 Nov 58	<u>21</u>	Apr 32 Jul 12	5	May 11 Jul-Nov 2.5	2	Nov-Jun 2.5 Jul-Oct 1	1	Mar-May 2 Many ≤ 1/2
CC-10-80 LEASE PARCEL 315	15 Mi. West of Pt. Conception	74	Apr 83 Nov 65	<u>25</u>	Apr 35 Jan/Jul/Nov 20	6	Apr 11 Sept 2	2	Feb 3 Jul-Oct 1	1.4	Mar-May 2.5 Aug/Sept 1/2

* PERCENTAGE OF TIME THAT DEPLOYMENT
BOAT COULD LEAVE THE SITE OF THE DRILLING
VESSEL

Exhibit 2

SOURCE: CLIMATOLOGICAL STUDY, SOUTHERN CALIFORNIA OPERATING AREA,
NATIONAL CLIMATIC CENTER, ASHVILLE, N.C. MARCH 1971

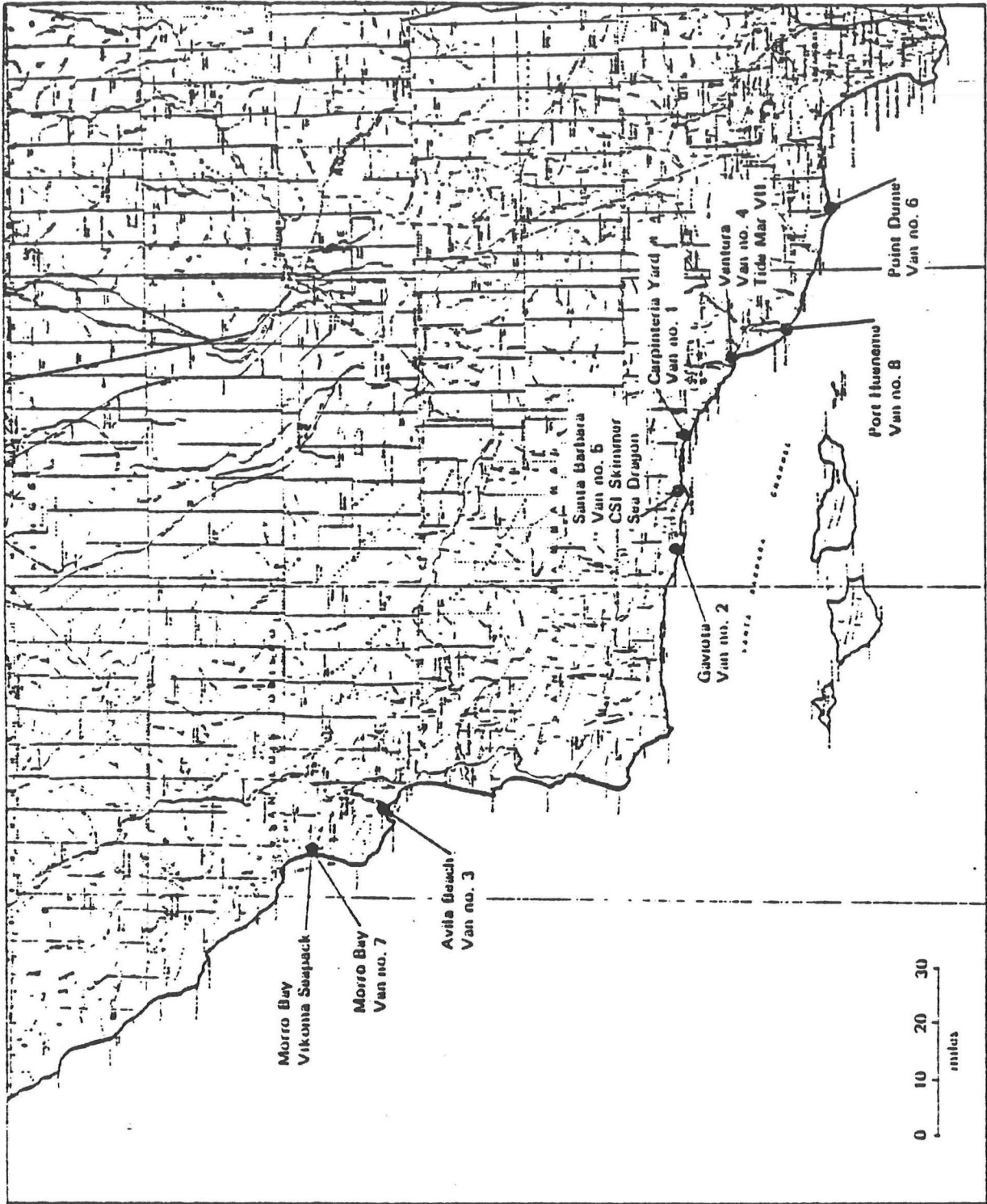


Figure 600-1. LOCATION OF CSI EQUIPMENT

OIL SPILL TRAJECTORIES FOR THE FIVE PLANS OF EXPLORATION

*Probabilities (in percent) that an oil spill starting at the approximate location of each Plan of Exploration will reach certain land areas within 3 days.

1. CC-8-80 Lease Parcel 215, 7-8 miles southwest of Ventura

If spill occurs:	Santa Cruz Island	9%
	Anacapa Island	21%

2. CC-9-80 Lease Parcel 324, 7-10 miles southwest of Point Conception

If spill occurs:	San Miguel Island	32%
	Santa Rosa Island	15%

3. CC-10-80 Lease Parcel 315, 10 miles west of Point Conception

If spill occurs:	San Miguel Island	18%
	Santa Rosa Island	1%

4. CC-11-80 Lease Parcel 248, 16 miles south of Santa Cruz Island

If spill occurs:	San Nicholas Island	7%
	Begg Rock	2%

5. CC-12-80 Lease Parcel 325, 5 miles southwest of Point Conception

If spill occurs:	San Miguel Island	32%
	Santa Rosa Island	15%