

# There's oil offshore: AMBAG girds for battle to keep it there

By BOB SMITH

Yes, there is oil off the north Santa Cruz County coast line.

But Santa Cruz County government, the Association of Monterey Bay Area Governments (AMBAG) and a host of environmental groups Friday renewed their commitment to block any attempts to pump that oil out of the sea.

The Shell Oil Co., drilling two exploratory wells off the coast in 1964, found significant quantities of oil in a fractured shale zone that extends northward past Ano Nuevo Island towards Pescadero Bay.

The find was never explored fully, said Donald Ziegler, chief geologist of Chevron, USA, because the oil companies didn't have the technology or economic incentive necessary for working in fractured shale then.

The test holes were bored in nearly 100 (320 feet) meters of water.

But with new technology, plus the higher cost of imported oil, the Santa Cruz oil is commercially attractive — if there are sufficient amounts.

In all, Ziegler told the AMBAG-sponsored conference at the new Monterey Conference Center, oil companies have drilled more than 15 exploratory wells along the northern California coastline that is now included in Lease Sale 53. And the oil company geologist estimates that there are one to two billion barrels of oil in the region from Pt. Conception to the Oregon Border.

The conference focused on the impacts off-shore drilling will have on the central coast and the

happens in the one-in-2,500 instances where an accident happens."

Cappello detailed the "hard" costs of the 1969 oil spill in Santa Barbara.

"Santa Barbara owned six miles of beaches. Real estate appraisers were prepared to testify that there was a loss of \$3 million.

"It cost another \$212,000 to

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clean up the beaches. The cost to clean the harbor floor and the sand bar was \$512,000."

Detergents used in the harbor to break up the floating oil attacked the water-proofing on the concrete floats in the small craft harbor. They sank. Replacement cost there was \$50,000-\$100,000.

"Sand removal in the harbor — \$180,000.

"The city's hard losses were \$3,985,000," Cappello said.

"We were originally offered \$600,000, but before the case went to trial the city received \$4 million."

The state received another \$4.5 million for damage to its land, and also for the injury to the area's wildlife.

The city figured it lost another \$5 million in sales tax when tourism dropped after the oil spill. But, said Cappello, it never recovered that money from the oil company.

panel on the impacts an oil spill has on marine life.

"It is unfortunate that two oil basins in Central California are next to areas with competing resources.

"Central California is an area," Doyle added, "which has attracted tourists and will for years to come. It is significant that 85 percent of the state's population lives within two hours

of the coast. They come here not only because of the view, but because of the biota — fishing, whales and the tidal pools."

J.B. Hundley, manager of off-shore operations for the Atlantic Richfield Co. said the oil companies' role is a difficult one.

"We must supply the energy needs without compromising the regulatory role of government or compromising the independence of business."

Hundley called for the continuation of the nomination process. He estimated 1.25 billion barrels of oil in the Lease Sale area, but said exploration doesn't guarantee that oil or gas will be found. The odds on each wildcat well is about 50 to 1 one against finding oil.

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Blow-out and oil spills draw the most public concern and condemnation, but there are many sources for the oil loosed on the ocean waters, Hundley said.

Quoting from a National Academy of Sciences report, Hundley said 10 percent of the ocean surface oil comes from natural seeps, 10 percent from boats, 40 percent from industrial and municipal wastes, 37 percent from tankers and marine transportation, and only three percent from off-shore production.

Hundley said that last year there were six spills from 22,000 wells and only two of those spills reached the shore line.

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delicate ecology of the Monterey Bay area.

The revelation that there were identifiable oil formations off the Santa Cruz County shore came as a surprise to many of the participants, including former county planning director and Santa Cruz city councilman Bert Muhly.

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Private property losses were also high.

Beach owners were entitled to loss compensation, he said. Commercial fishermen sued for their catch losses. Sportfishermen sued for the fish loss and also for the party boat business loss.

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parents, including former county planning director and Santa Cruz city councilman Bert Muhly.

Muhly said during the lunch break that he'd routinely received notices during the 1960s when he was the county planning director that off-shore drilling would take place, but he never knew the results.

In fact, he said, it had only been in the last couple of years that the oil companies were willing to take the information out of the proprietary area and publish it.

The decision by the Department of Interior on whether or not oil leases should be offered in the central California coast is a protracted one. Nominations for specific areas are due in Washington this June, but it won't be until 1981 that the Secretary of the Interior is scheduled to make a final decision.

The visual impact of an off-shore drilling rig wasn't mentioned by the conferees. The major concern was the result of an oil spill — large or small — on the coastline.

The cost of a major spill can be high, former Santa Barbara city attorney Barry Cappello told the conference.

The 1969 Santa Barbara channel spill from a Union Oil Co. platform off the coast set the tone for the public's reaction to future drilling requests, and cost the oil company nearly \$10 million in out-of-court settlements with governmental agencies.

"In 1969, the oil industry had virtually no controls over the methods it used to drill on the outer continental shelf," said Cappello.

"Today, controls are much better. But the problem is what

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James Rote, Gov. Brown's Assistant Secretary for Resources, called for a delay in the decision on Lease Sale 53 until environmental studies are completed.

And he sharply criticized the \$45-million-a-year environmental baseline studies being funded by the Department of the Interior.

"Information being gathered does not contribute to the lease decisions. I personally feel that this information is weighted towards the economic and not the environmental factors," Rote said.

Rote said the baseline studies now focus too much on the conditions found in deep water.

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"There should be greater emphasis on the on-shore and near-shore conditions, rather than just off-shore. Decisions have to be made on pipeline corridors and on-shore sites, too," he said.

"We should put off the decision on Lease Sale 53 until these critical decisions are made," Rote added.

UCSC professor William T. Doyle, director of the Center for Coastal Marine Studies in Santa Cruz, moderated a hard-hitting

spill from either platform, pipeline or tanker entered Monterey Bay.

There were an estimated 100,000 barrels of oil and only two of those spills reached the shore line.

Since the Santa Barbara blow-out, technology has been beefed up.

"Mud" systems have a great deal to do with preventing a blow-out," Hundley said, "and they have been improved.

"Well casings have been beefed up. In the Santa Barbara channel, instead of having two strings, we would now have four."

Technology has improved to the point, Hundley said, "that 80 percent of the failures on wells is due to human error.

"Platform crews are now sent to training schools every year or two years for a curriculum approved by the U.S. Geological Service.

"Each platform or drilling ship has 'first aid' equipment — enough to control minor oil spills."

But what would happen if an oil

species.

The bay is the home of many threatened marine and coastal species.

Dr. Jerry Kooyman of the Scripps Institute of Oceanography at La Jolla has been studying the effect of oil on the California sea otter — an animal whose range now includes most of Monterey Bay.

For the other marine

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# Offshore drilling debated

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mammals in the regions — the whales and the sea lions — the impact would be minimal or none, except in the breeding season. Whales, he said, would probably not stay in a contaminated area, but there would be a problem if the oil was aspirated by a whale coming up in the middle of a slick.

Sea lions were studied on San Miguel Island. "There was no increase in mortality because of the oil."

"The animals I presume that would have the most profound effect would be those that depend on fur for insulation.

"There are two animals — the fur seal and the California sea otter."

Kooyman has captured several otters from Monterey Bay and flown them to Scripps for studies on how oil affects the animals.

They were studied in water temperatures ranging from 10 to 30 degrees C.

"At 10 deg. C, we found they start increasing their metabolism rate. That temperature is similar to Monterey Bay and higher than Alaska water (where sea otters also range.)"

The oil test consisted of brushing on 30-60 milliliters of Prudhoe Bay crude oil — a very light oil that penetrates rapidly.

"At 15 deg. C, we found that the metabolism rate increases 60-100 per cent." This places a severe strain on the animal's energy reserves.

Washing doesn't help, either.

"After washing," said Kooyman, "metabolism increased even more but in a week's time, the animal was back to near normal, and in two weeks, the pelt was back to normal."

The washing solution used by the Scripps scientists was the same favored by the bird rescuers.

"Oiling is devastating to the otters," Kooyman concluded. "Rehabilitation is expensive in manpower and cost."

Oil lingers in an estuary, like Elkhorn Slough, far longer than any published scientific litera-

ture now indicates, said Woods Hole Oceanography Institute researcher John Teal.

Teal has been making detailed studies of the effects of a 1969 spill of No. 2 fuel oil (similar to diesel fuel) on the East Coast.

"There was an immediate kill of animals and grass. Almost all animals in the estuary contacted by the oil were killed," Teal said,

species in this area are on the endangered species list."

The most important areas for birds are the Farrallon Islands, Ano Nueve Island, Moss Landing, and Pt. Lobos, Briggs said.

"I can't argue that an oil spill is good, but we must look at what happens when it does occur," said Hundley.

"We are concerned about the

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talking about the immediate effect.

"The obvious effects were over in three to four years. The non-obvious effects are still going on."

Today, nine years after the spill, oil concentrations in some parts of the estuary are heavier than recorded originally.

Teal was angry about the poor turn-out for the AMBAG forum. Besides those directly involved in the conference, there were probably less than 30 people at the day-long conference.

"How are you going to judge what are the consequences of offshore drilling when you're not even here and when we know so little," Teal angrily asked.

And even if the entire two-billion barrels of oil is found, Teal said there is only 50 days supply for the United States.

"I don't care how much isn't going to be spilled," Teal added, "but I care how much is. The ocean is full of water; when you spill oil, it floats and comes ashore."

"And what is the value of the oil off-shore compared to the marine system you have now? You have to balance the whole thing and it is a hell of a tough job because you've got precious little information."

UCSC biologist Ken Briggs told the conference the most visible casualty of a spill are birds.

"Birds are conspicuous to the public and then have assignable economic values. A couple of

effect. Oil spills are rare; they have no lasting effect. Adequate precautions are being taken to prevent them from reaching shore.

"Let us be reasonable," Hundley pleaded. "The chances (of a spill) are very minimal. We need the energy."

Rep. Leon Panetta, in a short statement to the conference, called for continued opposition to the Monterey Bay area inclusion in Lease Sale 53.

Santa Cruz County supervisor Gary Patton urged AMBAG's continued participation in the decision-making process, and endorsed the Association's preparation of a "negative nomination" for the Monterey Bay area.

"Local government doesn't have to stand and do nothing. We can mount a political campaign to stop something we feel is indefensible."

"It is appropriate to attempt to intervene in the process by opposing, not merely by way of comment."

"I take the position," said Patton, "that it is completely inappropriate for us to begin developing oil (out there) until we have a meaningful national energy policy that address why we should do this here."

"Our national resources must not be sold off for the benefit of the giant corporations. AMBAG should use its resources to participate in the negative nomination."