Offshore Drilling: Fishermen and Oilmen Clash in Alaska

Anchorage. Efforts by a group of Alaska fishermen to invalidate a state offshore lease may offer a preview of what's ahead for offshore oil and gas leasing in general. At the same time, the fishermen's protest has opened a window onto the bureaucratic process by which at least one oil-rich state sells its hydrocarbons.

The fishermen are fighting in state court and in the political arena to void a December 1973 sale of oil and gas leases on 98,000 acres in the lower Cook Inlet Basin. The sale brought the state a total of about \$25 million. Included in the leased acreage were portions of Kachemak Bay totaling less than 5,000 acres. This is the focus of the conflict.

Kachemak Bay, near the mouth of Cook Inlet, is acknowledged to be one of the most biologically productive bodies of water in the nation, and perhaps the world. Although relatively small, the bay is among the most important breeding grounds and most productive fisheries in Alaska. The annual first wholesale value of the bay catch exceeds \$7 million. The catch includes all five species of salmon, three species of crab, and at least two species of shrimp, as well as herring and halibut. There are also major sport fisheries for all the commercial species. In addition, tourists and residents dig thousands of buckets of clams from the intertidal flats every year.

The waters near the mouth of the bay appear to be part of an unusual circular current system that concentrates food and holds shrimp and crab larvae through several molts.

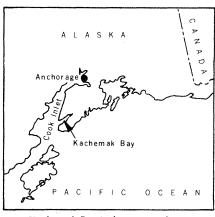
This gyre phenomenon has been known since at least 1968, when the Bureau of Commercial Fisheries (now the National Marine Fisheries Service) began a research program in the area. As a result of that and other research it became clear that the area serves as the major shellfish breeding ground for Cook Inlet and at least part of the Gulf of Alaska.

But the fishermen say that the state simply ignored the scientific evidence about the bay's importance. And they say they were routinely misinformed about the proposed lease, were not allowed to comment in a meaningful way, were denied a public hearing, and did not even know for sure that the bay would be included in the lease area until 2 weeks before the sale and long after the go-ahead decision was made.

For their part the companies that leased bay lands, notably Shell Oil and Standard Oil of California, argue that the fishermen's suit is "estopped" by an arcane doctrine known as "laches." In effect, this doctrine says that regardless of the merits of the suit it was filed too late and therefore is invalid. In addition, the companies say they have spent "considerable" sums on exploration and planning for Kachemak Bay drilling. Voiding the leases, they say, would cost them far more in real damages than any potential damage their activity might do the fishermen.

This May an Alaska District Court judge agreed with the companies' position and refused to hear the fishermen's case. Anchorage lawyer Warren Mathews is appealing the narrow legal ruling to the Alaska Supreme Court and expects a ruling within "about 6 months." Mathews represented fishermen from Cordova, Alaska, in their fight against the trans-Alaska pipeline. Ultimately an act of Congress was needed to overturn court decisions he won delaying construction of the line.

Ironically, the newly elected governor, Jay Hammond, may have doomed the fishermen's cause by espousing it in his campaign. Last fall Hammond, campaigning as a "conservationist," encouraged the fishermen in their fight and made a major campaign issue out of state leasing policies that led to the Kachemak Bay sale. Support for the fishermen has been credited as one of the main issues responsible for



Kachemak Bay is the contested area.

Hammond's narrow election victory. (He won by 285 votes.) Now he says, "I feel like a soldier who fires his artillery, charges forward to the enemy trenches, takes the position, and then discovers his shells haven't arrived yet."

In adopting the issue, Hammond may have inadvertently contributed to the late filing of the lawsuit. Affidavits in the court record indicate that Hammond's chief lieutenant several times counseled the fishermen to delay their lawsuit, apparently to keep the question alive for a campaign issue.

A deposition filed by one of the plaintiffs says that Bob Palmer, a former state senator and now Hammond's chief of staff, advised against filing the suit just 2 months after the lease sale. Again at a meeting in August 1974 at the Hammond campaign headquarters in Anchorage, according to the deposition, Palmer said, "... the Kachemak Bay mess would be cleaned up if Jay Hammond were elected...." Some of the fishermen feel they were sold out and community bitterness against the political process is mounting.

Besides the strictly political aspects of the situation, the fishermen say that the bureaucratic process the state uses to lease oil and gas lands is discriminatory, fails to take important information into account, and is so informal as to be irrational.

During pretrial investigations evidence surfaced which indicates that the leasing process, not too unlike the federal procedures, is a series of official "Catch-22's."

Twenty months before the December 1973 lease, the Alaska Department of Natural Resources decided to hold a series of sales in the lower Cook Inlet Basin. Potentially, Kachemak Bay would be included in this area, so officials from the nearby town, Homer, wrote seeking information about possible bay leasing. They were regularly told by state officials that interest in the bay was "slight" and chances of leases therefore "small." Therefore, local officials were told they needn't seek further information.

Public Hearing Refused

Finally, 8 months before the lease, the head of the Homer Chamber of Commerce wrote to the director of the state minerals division complaining that it was impossible to get information on potential lease sales because the decisions about which lands to offer were made through a closed process. Industry nominates lands it is interested in leasing and the state chooses lands from among those nominated for the actual sale. There was, he said, no provision for public input.

Somewhat incongruously, the state min-

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erals director wrote back saying that the proper time for "appropriate" public comment was after nominations were taken and before the sale was announced. It was never made clear how the public, not privy to the semisecret dealings between government and industry, was to know when the proper time arrived.

Early in August 1973 the Homer city manager wrote again to the state minerals chief seeking further clarification of Kachemak's status in the leasing program. On 22 August the minerals director wrote back saying, essentially, "we don't know exactly what areas will be included, but we expect little interest in Kachemak Bay." Less than a month later he wrote to the commissioner of natural resources recommending a sale to include Kachemak Bay in December 1973. On 19 October, the commissioner, after reviewing the plan with then Governor William Egan, gave his approval for the sale.

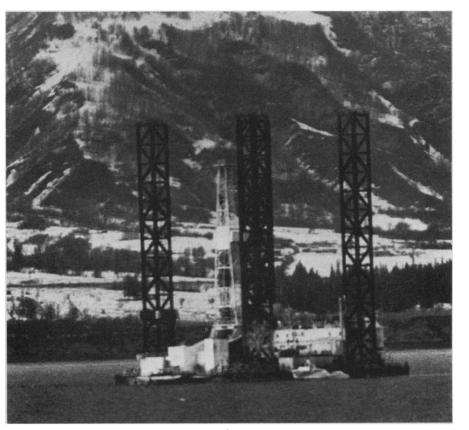
Two weeks before the 13 December sale date area residents felt they finally had concrete information that a sale was to be held and sought a public hearing on it. A petition drive garnered 275 signatures. But state officials refused to hold the hearing because the lease process was too far along and it was too late for public input. Besides, they indicated, there were no outstanding issues in the sale that a public hearing could help resolve.

Almost as an afterthought, it seems, the State Department of Natural Resources sought information on the biological community in the bay. On 22 October Natural Resources finally asked the Alaska Department of Fish and Game (ADFG) for comment on the sale. "Due to a communication problem in our department we were very late in deciding which areas to offer," the Natural Resources memo said. It asked for comments within a week so that notice of the sale could be published the first week of November, just meeting the legal notice requirement.

The ADFG area biologist in Homer, Loren Flagg, received the memo on 29 October. He hurriedly drafted a memo to his superiors calling their attention to the importance of the bay. He said, in part:

The ADFG should seek an immediate delay of 30 days in the sale "to allow sufficient input from all state and government agencies and from the public.

"We believe, and have evidence to support our belief, that Kachemak Bay... is one of the most highly productive marine environments in the world. The Cook Inlet staff feels that this area should be classified as critical habitat and that no development should be allowed which would risk this extremely valuable environment."



Preparing for exploratory drilling, a "jack-up" oil rig is anchored in Kachemak Bay.

The Bluff Point area (one of the places subsequently leased) is both a "major reproductive area" and a "major rearing area" for shrimp and crab.

"Kachemak Bay harbors tremendous populations of shorebirds and waterfowl at various times of the year. The bay also has various forms of marine mammals and many other forms of marine life... oil development in an area so rich in life is not worth the risks involved."

But by the time Flagg was consulted his suggestions were largely too late. He thought his comments would influence the decision-making process, but actually the decision to offer bay lands had already been made. The consultation with ADFG was almost a pro forma exercise. Flagg's comments in the strong pro-oil climate of 1973 were extremely courageous. If anything he may have understated what was at stake in the bay and underestimated the potential risks from oil development.

At the isolated National Marine Fisheries Service (NMFS) field station at Kisitsna Bay, a small arm of Kachemak reachable only by light plane or small boat, Evan Haines has been doing research on the life cycle of shrimp for 4 years. As the result of extensive NMFS population studies, he is able to say that Kachemak Bay "is [far] more productive...than most people realize. "On a given area basis," he says, "Kachemak Bay is at least ten times more productive than the Gulf of Mexico. We found that the production of this area is such that you can harvest about half the [shrimp] stock [per year] and still maintain the quotas which are pretty high, especially on a species that only lives 4 or 5 years."

Since 1972 Haines has surveyed the bay to determine on a three-dimensional plot where the most productive areas were. On the basis of that research he says, "we know that the drill site is located in a spot that is a very critical habitat for the larval stages. Apparently the larvae are held in there, and it has something to do with the currents.

"I speculate," he says, "that there is some type of a current holding them in. For instance, with king crab larvae you find all four stages until the settling stage in there ... you're talking about a time from release to settling of 3 or 4 months. No organism can possibly maintain itself in an area for that length of time without some type of circular motion being involved.

"I had a series of stations," Haines says, "when I got done plotting. Without a doubt there they were [at the proposed drill site], right at that station. Not only king crab larvae, but Tanner crab and high concentrations of Dungeness crab larvae and two commercial species of shrimp as well. All of them were right there.

"I worked up the data," Haines continued, "without any knowledge whatsoever of potential drilling, and I gave the information, as we always do, to [ADFG]. They called me back the next day... and said, 'You know what's going on? They're thinking of drilling out there and the drill site is right at station 17.'

"They couldn't have picked a worse site," Haines says, "in regards to the biology of the bay." And he notes that larvae are "much more susceptible to any adverse environmental threats than later stages."

Working independently at Kisitsna Bay and at the main NMFS laboratory at Auke Bay, near Juneau, two other researchers seem to be confirming Haines' fears about the dangers of environmental stress, especially petroleum pollution, to shellfish larvae.

At Kisitsna Bay, Tony Micklenburg says that "at 7 ppm [parts per million] of petroleum in solution with seawater we get a complete kill of larvae." He is presently reducing the oil concentration and seeking an LD_{50} level (lethal dose needed to kill half a test population).

At Auke Bay, John Karinen, working partly under a \$175,000 NMFS toxicity study funded by Shell Oil, feels that Dungeness crab larvae are even more sensitive to oil in the water. His preliminary results indicate an LD_{50} for Dungeness crab larvae of less than 1 ppm. The LD_{50} for other shellfish, he says, seems to lie in the range of 1 to 5 ppm.

But he thinks there are other significant effects on organisms from concentrations of oil far too small to kill outright. "I'm pretty sure there are behavior effects from amounts so tiny they're practically molecular," Karinen says. Possible effects include failure of an organism to mate or to release premating sex attractants (pheromones) and failure to respond to light affecting feeding and growth.

"Any spill situation," he says, "will exceed these $[LD_{s0}]$ values even at depth. A spill in Chebucto Bay, Nova Scotia, left emulsions of oil 50 meters deep in the water column and 10 kilometers from the spill site."

Industry figures seem to indicate tolerances for much higher levels of oil. One reason, he suggests, might be the way the oil is mixed into the water and the way the concentration is ultimately measured. "We mix oil into the seawater for 20 hours before we begin a test," he says. Oil values are checked by extraction, infrared absorption, and gas chromatography.

But apart from long-range dangers such as oil spills and other pollution, the fishermen see another threat from oil exploration that they think is more immediate. "We lost 40 pots out there this past year due to increased traffic, most of it due to oil work. If there's drilling out there it will wipe us out," says Rosalee "Snooks" Moore. With her husband Ken, she operates three boats that fish Kachemak Bay and occasionally Cook Inlet and the Gulf of Alaska in good weather. In addition to keeping the books, she skippers one of the boats that fishes the bay for salmon and shellfish, particularly king crab.

Crabbing Gear Lost

Pots are the tools of the crabber's trade. The pots used by Alaska crabbers are steel mesh boxes as big as 6 feet on a side. They are baited and dropped to the ocean floor but attached by ropes to a surface buoy that helps the fishermen identify and locate their own pots. An Alaska crab pot, Moore says, costs "anywhere from \$450 to \$600 plus the cost of up to 500 feet of heavy nylon line and the buoys."

The trouble, she says, is that careless or "ignorant" oil company workboat and tug operators run over the buoys and "they cut them right off." Without the buoys, fisherman can't locate their pots and lose them. In addition, the pots keep trapping crabs that can never be recovered, depleting crab stocks and competing with captive pots.

Last winter Shell Oil moved a "jack-up" drilling rig into Kachemak Bay to begin exploratory drilling. Moore says the rig or its towboats cut off seven of her pots in one night. "The loss for us for those pots and their product for 20 days before they were replaced was over \$8000," she says. She conservatively estimated the value of the lost catch at more than \$5000.

If the Moores, among the bay's highest earners, sustain comparable gear losses again next year, they fear they may be driven out of the fishing business. "Crabbing is the biggest part of our income," Moore says. "If we lose that, I think we'll have to look somewhere else. But I don't think there's anywhere else, especially with the boats we have—a 42-footer and a 56footer. They're basically not real rough water boats, they're bay crabbers. And you don't go very far with a bay crabber—not unless you want to die."

Fishing is an expensive gamble against the elements and an uncertain market. Boats costing as much as \$200,000 are not uncommon in Alaskan waters. And some families have grown wealthy fishing, with crab or salmon catches some years bringing in as much as \$100,000 or more. But the brisk trade in repossessed boats indicates how thin the line is between success and failure for the fisherman.

Hit hard by rising costs for equipment,

credit, fuel, and maintenance, faced with uncertain markets and catches as a result of foreign competition, the fishermen feel buffeted by forces beyond their control already. But to lose thousands of dollars worth of gear to workboats and drilling rigs infuriates them further.

When company officials come to Homer seeking to settle claims for lost gear they find an atmosphere heavy with hostility. Fishermen are driven to near frenzy, they say, when oil companies worth hundreds of millions of dollars haggle over a few thousand dollars worth of crab pots that can make the difference between making a profit and seeing a boat repossessed. An incident in which Shell promised to carry a local fisherman aboard the rig when it was moved to guide it through the fishing grounds, but then inexplicably failed to call him, poisoned the air still further.

Privately, company officials admit that the publicity from Kachemak Bay is hurting them, and some doubt that any oil strike there will be sufficient to offset that. But they also see themselves as victims of a situation that they didn't create. "We followed all the rules," says an oilman, "it's not our fault that we bid on these contested lands. The state offered them for sale."

State officials say also that they were just following well-established policies and practices for leasing oil and gas lands. "This was no different from any previous sale, and there was never any complaint before," a state official says.

In a real way the oilmen and the bureaucrats are right; there were no basic differences between the Kachemak Bay sale and its predecessors. Although the bay's richness makes it the ideal focus for a challenge, the real differences are psychological rather than physical. The fishermen of Kachemak Bay see their life and their livelihood equally under attack by forces they feel are arrogant, insensitive, and shortsighted. They have organized an angry political and legal campaign to defend themselves. At one time in Alaska and most of the rest of the United States, energy production was sacrosanct. But last fall, adopted as an election issue, the Kachemak Bay challenge touched enough voters to play a major role in electing a "conservationist" governor. Although the ultimate fate of this challenge will be decided in the courtroom, it seems clear that the fishermen of Kachemak Bay have already influenced future state sales and possibly federal sales as well.---MARK PANITCH

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