Fish Like the Warmer Waters of PG&E Plants

Fishermen rarely criticize ility companies for the warer temperature of water ear thermal power plants.
hat's where the fishing is
kely to be best.

This is one finding in stues by the California Departent of Fish and Game, arious colleges and the power ompanies in the state. The udies show that many spees, including striped bass, erch and catfish, seem to refer the slightly warmer ater temperature. Fisheren often cluster near power ant discharge points to take

lyantage of this.

Pacific Gas and Electric ompany began investigating fects of thermal power ants on aquatic life in 1951. sing increasingly sophistiated equipment, the company as found through the years at warmer water, a result of s use as a coolant in power ant condensers, is mearable in only small areas ose to the point of discharge.

On the basis of intensive udies at nine power plants, G&E's James R. Adams, quatic biologist, recently reorted:

"A projection based on ese measurements indicates at if all 16,972,000 kilowatts capacity in tidewater theral stations in California ere operated at the same me at maximum capacity, e area in which the surface mperature would be raised degrees F or more above ormal would be only 6 square

iles. "Similarly, the area in hich surface temperatures ould be raised 10 degrees F more would be less than one

alf square mile.

"The affected areas are mall in relation to Calirnia's 1205 miles of ocean noreline as well as bays and stuaries, which have a total urface area of about 400

quare miles. "Another factor lessens the npact. The power plants oerate at only 50 to 60 per ent of maximum possible geeration on a yearly basis. "Part of the public misunerstanding about the thermal fect of power plants arises om laboratory tests on fish nd other marine life under onditions more severe and of nger duration than actual eld conditions. Too often e lab studies overlook the ze of the area influenced by cooling water discharge d the time in which an ornism is subjected to a parcular temperature increase. "Evidence indicated that in e immediate vicinity of theral power plant discharges, uthern California warm war forms of aquatic life tend predominate over cold ter Northern California

and that their total

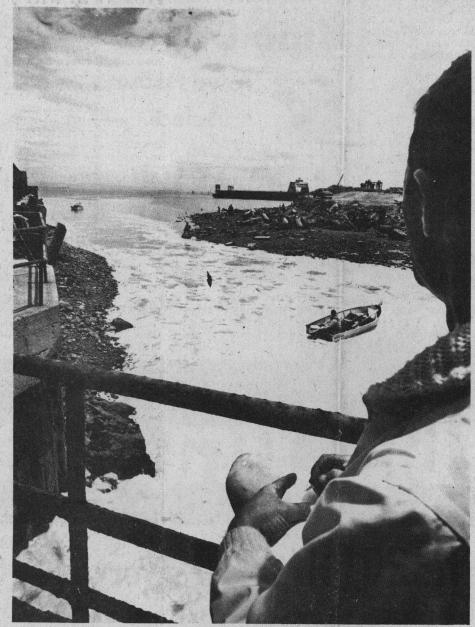
antity is much increased."

The sun itself creates more

at in Morro Bay waters than

G&E's power plant, accor-

rms,



ANGLER'S FAVORITE -- Barely visible in the background, half a dozen fishermen ignore a PG&E research team measuring current direction, velocity and temperature of water discharged from Potrero Power Plant in San Francisco. A concentrated dye permits accurate measurements at different depths.

ding to a PG&E study cited by the biologist. "The sunwarmed shallows of Morro Bay, when carried by the outgoing tide to the Pacific Ocean, added 5.7 times as much heat to the ocean as the power plant," he said. The same holds true for San Francisco Bay and many other areas.

The heating of water in power plant condensers does not cause a change in the dissolved oxygen level of the water. This conclusion is based on studies conducted independently at El Segundo and Morro Bay.

As for the impact of nuclear power plant water discharges, Adams says that PG&E's Humboldt Bay nuclear unit at Eureka has stayed far below the U. S. Atomic Energy Commission's conservative limits. "No harm could come to man even if he derived his entire protein intake from oysters growing in the discharge canal of the Humboldt Bay plant," Adams said.

Prime Rate Drop by Banks

Drop in the prime interest rate from 8-1/2 to 8 per cent will eventually effect Santa Cruz County, three bankers agreed today.

However, they could not see any immediate loosening of the tight money market for home buyers as a result of the drop. The prime rate is that paid by blue chip investors on large loans.

"We don't have many people borrowing in \$1 million amounts here," said R.J. Seller, president of County Bank.

Seller said the only immediate effect would be psychological which might spark an upswing in activity.

Bill Cooks of Crocker Citizens said there would probably be some effect on short term commercial loans by next week.

"It will be three or four months before any change is foreseen in real estate loans. They might drop by one quarof one percent," Cooks

A wait and see policy is being taken by Warren Cottrell at Wells Fargo.

"Funds are still tight and money just isn't available for loaning," Cottrell said. He commented things were still in a state of flux and the prime rate could change ag-

Cold Air Expert to Get

Air conditioning expert Joseph Louden of Pacheco may finally get his money out of

Files for Board Felton -- Lloyd J. Linn,