'Greenhouse effect' could put Waikiki under water

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Waikiki will be below sea level some time in the next 100 years, according to scientists.

Although most figure it won't happen for a hundred years, others think it could occur sooner. They believe the sea level could rise as much as 10 meters, which would put Kalakaua Avenue awash in water.

Dr. Lorenz Magaard, chairman of the University of Hawaii Department of Oceanography, said the expected rise in sea level is due to the "greenhouse effect."

The increased burning of fossil fuels and other organic materials is raising the level of carbon dioxide in the atmosphere, and this is believed to cloak the Earth in a way that prevents heat from escaping.

As the Earth heats up, the polar ice caps are expected to begin melting. This will raise sea levels, potentially making every Waikiki condo an oceanfront unit. It doesn't mean you should sell out, but if nothing changes, there is a risk to low-lying and oceanfront structures eventually, Magaard said.

"There could be problems within the lifetime of these structures," he said.

To a degree, however, the ocean itself can help the problem by sucking carbon dioxide out of the atmosphere. But more research is needed to determine just how much the ocean can do, Magaard said.

The greenhouse effect was not a main topic of the recent Governor's Symposium on Ocean Science and Technology, but it pointed to one of the reasons many scientists feel it's so important to study the sea.

For Hawaii, Magaard said, such research is important not only for the results of the research, but for the dollars researchers spend.

"Ocean research is an industry in itself," he said.

There is also "clean" power potential in the Big Island's huge geothermal resources. That island can produce far more electricity than its foreseeable population will require. Oahu has no such power production capacity, but has a huge demand.

Shipping that power from Hawaii to Oahu through a cable between the Islands may be the solution, scientists say.

"No one has ever installed and operated a power cable that deep, 6,000 feet," said William Bonnet of Hawaiian Electric Co.

Research into the cable's feasibility has involved sophisticated mapping of the sea floor

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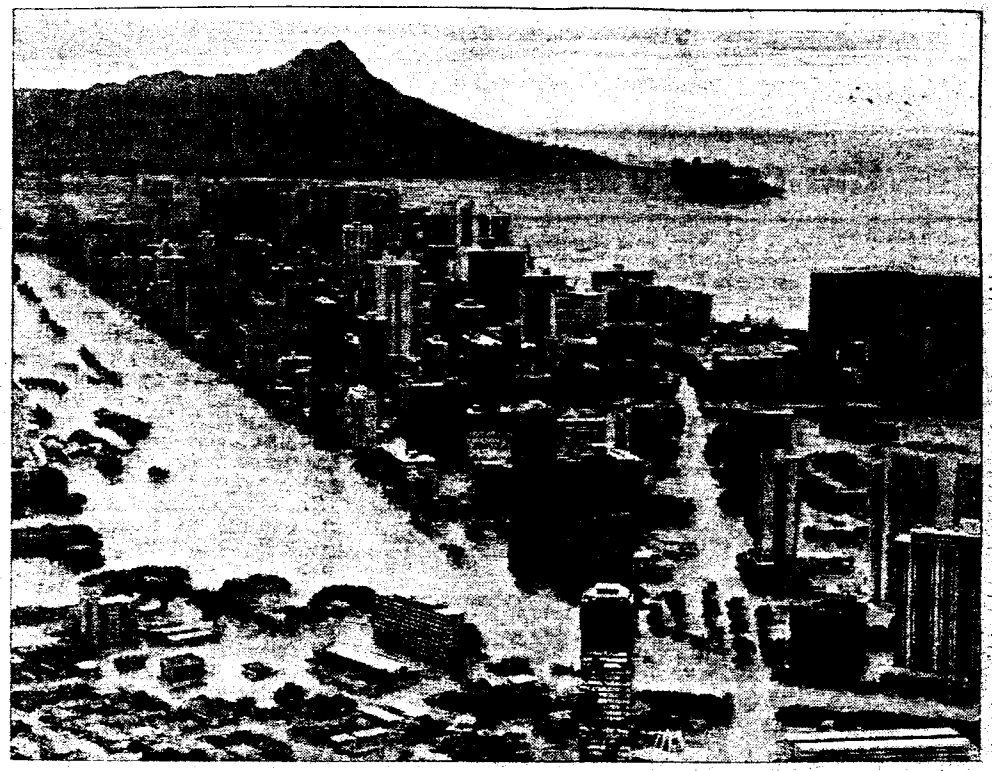

Artist's conception of what Waikiki would look like if the sea level rose.