

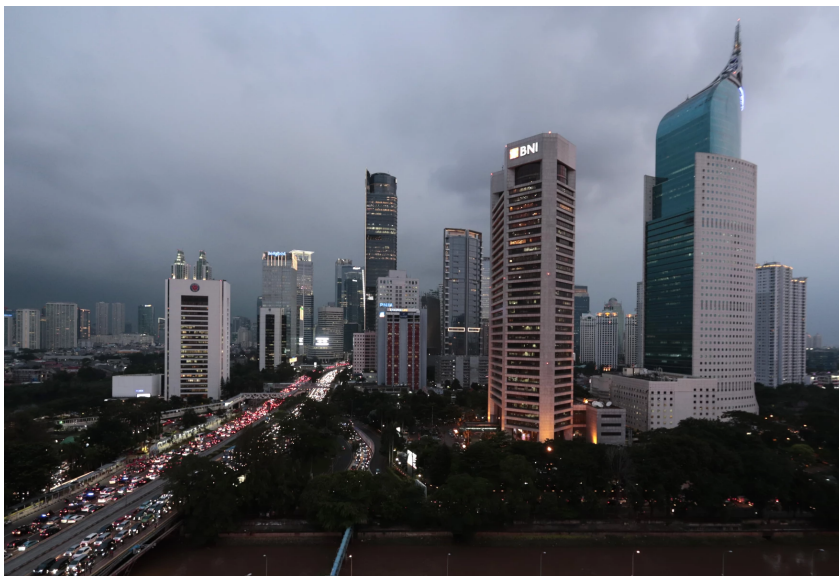
Asia Minute: Study finds coastal dangers include not only sea level rise, but also sinking cities

Hawaii Public Radio | By **Bill Dorman**

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Dita Alangkara / AP

The central business district skyline is seen at dusk on Monday in Jakarta, Indonesia.

The impact of climate change is showing up in different ways all over the world. In parts of coastal Southeast Asia, it's a sinking feeling — especially in some large cities.

A new scientific study shows how rapidly several cities on the coasts of Southeast Asia are sinking.

Geologists have been following this trend for years — they call it “land subsidence.”



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Much of that sinking comes from the removal of water underneath the surface of the ground.

That water is often extracted to be used in construction and for other purposes as the demand for water increases along with the local urban population.

Climate change further complicates this picture because it makes the cities more vulnerable to sea-level rise.

This has been a well-documented phenomenon in Jakarta, Manila, and other large coastal Southeast Asian cities.

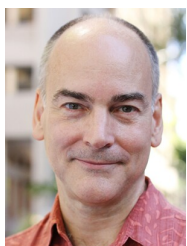
A study published this spring in the journal Geophysical Research Letters found that

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Another study published this month in the journal Nature Sustainability finds both Jakarta and Vietnam's Ho Chi Minh City sinking largely because of "excessive groundwater extraction."

In Ho Chi Minh City, that's exacerbated by a concentration of high-rise buildings in areas with weak foundations.

The study also cites vulnerability to extreme rainfall as another factor that will increase the risk of flooding — especially in coastal cities.

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Bill Dorman has been the news director at Hawai'i Public Radio since 2011.

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