As many Pacific islands are rising as are sinking

by Peter Purcell

Many people find it difficult to accept that "global warming," now rebranded as anthropogenic global warming (AGW), is not real, given how constantly it is presented as fact by national and international governments and agencies, and the media.

I was reminded of this recently when I suggested to my daughter that global warming might be better seen as a natural long-term trend, related to Earth's emergence from the last ice age. This was challenged as arrogance for its implication that I knew more than the BBC and Time magazine.

As anyone who has tried it can confirm, arguing against AGW in discussions at dinner parties or around the office coffee machine will get one howled down as a "denier" and dismissed. Frontal assaults on AGW are almost always lost battles these days but there is valuable territory to be won from guerrilla sniping on the flanks, where points of weakness are exposed.

By coincidence, Time has just provided a very useful example of just such a point. Its June 24, 2019, cover story (actually more a sermon), "Our sinking world," has the usual photo of a troubled politician standing in the "rising" ocean. This time it is United Nations Secretary-General Antonio Guterres knee deep in the ocean on Tuvalu. He doesn't look too happy about it but at least it's a change from the ubiquitous shot of the Maldives Prime Minister holding a cabinet meeting underwater.

The principal claim of the Time story is that the Fijian village of Vunidogoloa is sinking under AGW-driven rising seas and that other Pacific islands such as Tuvalu face a similar fate.

Vunidogoloa village was located for decades at the southwest end of Natewa Bay on the eastern side of the island of Vanua Levu. It was built on the estuary of a large river emptying into the bay and was only a few metres from the shore. Not surprisingly, it was subject to flooding during cyclones, heavy rains and king tides, and this periodic inundation began to cause problems in the 1950s.

A village spokesman told the Fiji Sun that they didn't know it was climate change affecting them in the 1950s. They hadn't heard about AGW back then. That's not surprising: no one had heard of AGW then. The big scare then was that decreasing global temperatures coincident with rising carbon-dioxide levels might be pointers to a new ice age.

The spokesman said that the villagers had sentimental attachments to the old site but the main reason they didn't move was the lack of money to pay for construction.

Not any more! Generous funding through various UN-led initiatives is now available from Western countries that believe that they, Canute-like, are causing the waters to rise. The Fijian Government spent $A700,000 moving the village inland a few years ago and has plans to move 40 more.

When I was briefly in Fiji in the 1990s doing geological research, I learned from the Fijian Geological Survey that the western side of Viti Levu (the main island) was rising because of earth dynamics related to the Pacific ocean-plate tectonics.

This rotational uplift had created a sharp cliff-line along the western coast. (It was a subject of much discussion because a Survey geologist had just been killed by falling over it.)

By contrast, that same rotation of the island meant that the eastern side was sinking, and the coastline there was an inundated swampy shore, with slowly encroaching seas. These changes are physiographically obvious and are being measured by tidal and elevation gauges.

Given that Vanua Levu island is close by, it is reasonable to suspect that the sinking of its eastern coast and Vunidogoloa village is also caused by the tectonic uplifting of the western side of the island. AGW had nothing to do with it in the 1950s or since.

The claim that Tuvalu (actually not a single island but over 100 atolls and reefs) is similarly under threat of sinking is also false. If it is doing anything overall, Tuvalu is rising.

Professor Paul Kench and his team from New Zealand's University of Auckland School of Environment made a study of the changing shape of 110 atolls and reef islands in Tuvalu between 1971 and 2014. They reported in the prestigious peer-reviewed journal Nature that 74 per cent of the islands had increased in land area, while 26 per cent had decreased in size.

Professor Kench noted in the publication that the flaw in the "sinking islands" paradigm was the mistaken idea that atolls and coral islands are static entities that will simply drown if sea level rises. In reality, they are geologically dynamic and adapt to changes in sea level and climate. Wave and sediment supply processes serve both to erode and build the islands and are of sufficient magnitude to mask any impact of sea level rises.

In short, the changes at Tuvalu are environmental, not anthropogenic. Professor Kench's group has reported sim-
ilar results from studies of other Pacific islands.

Nor is Tuvalu unique in this regard. A study of atolls in the Tuamotu islands, French Polynesia, by the University of Rochelle (France) from 1969 to 2013 found that 41 per cent remained stable in area, 33 per cent expanded and 26 per cent contracted. Many islands were eroded on the windward side but expanded on the leeward side.

While cyclones are regularly described in the media as forces of destruction, the opposite appeared to be the case in this Tuamotu study: tropical cyclone Orama in 1983 deposited new sediment over 60 per cent of the islands’ land areas and contributed significantly to island growth.

Professor Kench says that the Tuvalu study shows “continued expansion of the majority of medium (one to 10 hectares) and larger-sized islands greater than 10 hectares), stability of reef platform islands and increased mobility of atoll reef rim islands”.

The shapes may change but “the physical foundation of the islands will persist as potential pedestals for habitation over the coming century”.

Despite their clarity, these scientific facts are routinely misrepresented. The internet offers ready access to articles that cite Professor Kench’s work as proving that Tuvalu is sinking. This is done by taking one of the 26 islands that did reduce in size, albeit for perfectly natural reasons, attributing the decrease in size to rising sea levels and using that island to represent all of Tuvalu or, more broadly, all the Pacific islands.

These lies should be ignored. These studies offer good news, even if they are less than supportive of claims by island nations for major capital compensation. Whatever rise in sea level is deemed to have occurred, most islands have increased in size regardless. Exceptions will occur, as at Vunidogoloa, but the Pacific islands are not sinking. Sea-level rises will not flood the islands and their peoples.

This point can be safely argued at the dinner party or coffee machine as an example of AGW being incorrectly blamed for natural events. Both studies are easily found on the internet, as is an article on Vunidogoloa on watsupwiththat.com. Download them as PDFs and offer to send them to the unbelievers.

Peter Purcell is a professional geologist with a long-standing interest in environmental and indigenous rights issues.

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THE LITTLE GREY BOOK
ON SEX AND TRANSGENDER

Wilkinson, Melbourne, 2019, paperback, 95 pages, $19.99
If a person can change their sex, can they change their age or race?

The Little Grey Book on Sex and Transgender questions the ideology (a philosophical “belief” with a political agenda) of transgenderism. The transgender world view says that laws should recognise a person’s fluid “gender identity” other than, or in place of, their fixed biological sex.

But transgenderism presents many conundrums. Are we all on a spectrum between 100 per cent male and 100 per cent female, or are we all just male or female? Should biological girls be obliged to accept biological boys who identify as women in their safe spaces at schools? Should two biological men who identify as women be recognised as lesbians? Should “gender identity” laws oblige everyone – on threat of legal, professional, employment and cultural sanctions – to give biological men who identify as women the same rights as biological women?

Activists demand gender-neutral language, sports, restrooms, change rooms, etc. This treats men and women as same-same, uniform … one shade of grey.

Patrick J. Byrne asks searching questions about the impact of gender identity laws on ordinary people and democracy.