Feature nuti ou

Inside the locked gates

Jonathan Milne makes the 4WD trip up the valley behind Turangi to inspect the new water intake and treatment complex.

Health and safety manager George Rankin and Project Management Unit land specialist Aku Utanga prepare to lock down the construction site for another day. 19090809

It's been raining since 2013, says Ake Utanga.

The land specialist for government's Project Management Unit is mulling over when the last serious dry spell was, when water stopped running from Rarotonga taps. She reckons there's been rain for a while.

Tall, red-bearded James Taylor, the project manager for contractors McConnell Dowell, has stubbed out his cigarette, and laughs. That feels about right, he grimaces.

Some tourists this winter may have felt they were short-changed on their beach holiday, with weeks when it rained every day. But it's not enough. The rain hasn't kept the streams full, and in July the island came close to a serious water shortage.

Now, we're standing beneath a massive new stainless steel water tank, one of 11 built at intakes around the country. This big one holds 2.3 million litres. So will all 11 of these new tanks, combined with some smaller existing reservoirs, get us through the next dry spell?

Not even. At best, says Brent Manning, Rarotonga's total 20 million litres of storage might last the island for two or three days, if the streams dry up.

That's how much water the residents and tourists of Rarotonga use, or waste.

Manning, a former New Zealand army major, is now chief executive of To Tatou Vai Ltd – the government-owned water company charged with delivering safe water to every home in Rarotonga.

He's probably the one who has borne the brunt of public and political concern about the project to roll out new water pipes around the island, and to treat water for delivery to every home on Rarotonga.

There were missteps: chlorine opponents' discovery that contractors had already ordered a trial batch of chlorine for disinfecting water, and that Manning had put out a tender calling for a year's supply – at the same time government was "consulting" with the public about how to disinfect the water.

And it gave real momentum to emerging opposition to chlorine – the perception the decision was a fait accompli, that it was to be forced down people's throats, whether they liked it or not.

The story ran on the front page of Cook Islands News. And the next day, the Prime Minister called an urgent meeting and Manning was ordered to hold fire on his tender, until the decision on chlorination is formally signed off by Cabinet.

By most accounts, Manning got a rap over the knuckles. But it seems to have been a turning point – because one of the biggest problems was the lack of transparency in the roll-out of the water reticulation and treatment plans. And that changed, that very week.

The standard of openness from the Project Management Unit, GHD, Te Mato Vai and To Tatou Vai since then has been exemplary. They have discovered a very real understanding of the importance of actually talking to the community, and more important still, listening to them.

The Cabinet sign-off for chlorination still hasn't happened – though to be blunt, it does still look rather like a fait accompli.

But now, these eight senior executives and engineers are taking the whole morning out from their no-doubt busy schedules to offer a guided tour to the Cook Islands News, and to outspoken chlorine opponents Justine Flanagan and Andy Kirkwood.

The chlorine sheds and tanks and rechargeable battery-powered pumps are already built and installed at each of the 10 intakes. And there is no Plan B. Anolyte, the favoured disinfection solution of the chattering classes, would require power to be run up the valleys to each of the 10 intakes – they've costed that at between $1 and $4 million, and then an ongoing power bill of $100,000 a year. Ozone, UV, none of these are seen as even half-viable solutions to a water reticulation challenge as complex as Rarotonga's.

The thought, as some suggest, of not treating the water at all? Well, that brings a looks of barely-concealed terror to the eyes of the eight engineers and executives gathered up by the Turangi intake, in their work boots and hi-vis vests.

It is they (and their political masters) who will be accountable if the giardia and campylobacter and other nasties that sometimes infect Rarotonga water cause a mass outbreak of illness and death, as they do so often in so many nations.

To Tatou Vai board member Sam Napa Sr recalls three people being killed and many more suffering serious illness from drinking untreated water in Rarotonga's biggest waterborne disease outbreak, in 1964.

The most recent World Health Organisation figures say waterborne illnesses are the world's biggest killer, responsible for 2 million deaths a year. That is why the WHO and United Nations are pleading with the Cooks government to clean up the water supply.

Tanks beneath the flocculation vats. 19090808

In a 2017 report on the well-being of Cook Islands children, UNICEF says that to meet the criteria for a safely-managed drinking water service, the water source should be accessible in families' homes, it should be available when needed, and it should be free from contamination. "A lack of basic sanitation, hygiene and safe drinking water has been shown to contribute to the spread of water-related diseases (including diarrhoea), which are in turn a significant cause of under-5 child mortality in the Pacific region."

And it expresses concern that the Rarotonga water supply experiences shortages during drought conditions, "which appear to be occurring more frequently".

Tangianau Taoro is deputy project manager at the government's Project Management Unit, overseeing big projects like sewage treatment for Muri and beyond; the roll-out of the new water pipes around Rarotonga, and working with To Tatou Vai to set in place treated water to every home and business.

She's stepped into some big shoes – and quite literally. Taoro is last to arrive, as we gather on Are Metua by the old palace at Turangi. She gets out of her silver 4WD, grabs a hi-vis vest and hard hat from the back, and changes from her elegant shimmering sandals into a pair of robust grey trainers for the trip up to the intake.

Taoro seems to be the conscience of this team; deeply embedded in the community, she knows everyone and cares about them. She doesn't rush; her words are considered. It is she who leads us in prayer, before we get into the pickups for the trip up to the Turangi valley.

She too remembers some of the shortages of past years. "In the last major drought, myself and my family had to bathe in the sea."

But the impact of water shortages are more serious than having to take the odd dip in the lagoon. The problems of water shortages and of deciding how we disinfect our water are intrinsically linked.