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Spectacular Rotorua geyser showing signs of life again

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A Rotorua geyser, once known for its spectacular hot water eruptions which reached heights of 20 metres, is showing signs of rejuvenation after being in a dormant state for over 40 years.

The Waikite geyser, which used to be known as the crown-jewel of the Whakarewarewa geothermal area has not had a major steam eruption since 1969. Since then, there has also been no detection of shallow acidic fluids in the geyser.

But scientists say tests from the Waikite and surrounding Whakarewarewa area carried out over the past year, indicate it may be returning to its former magnificence.

"The signs we are seeing are very encouraging," said GNS geothermal scientists Dr Ed Mroczek .

Elevated levels of chloride in the hot water at Whakarewarewa indicated that pressure had increased and water from deeper in the earth was being pushed toward the surface, said Dr Mroczek.

Scientists from GNS also said an increase in geothermal water coming into the throat of the Waikite geyser over the past year was a promising sign.

"Our monitoring has shown that not all geysers and springs have returned to their former state, but it is really encouraging to see signs of activity at the Waikite," Dr Mroczek said.

Since the 1950s, an increase in the number of bores in Rotorua is believed to have contributed to a decline of many geysers, such as the Waikite.

Retired Rotorua scientist Ted Lloyd said during the 1960s and 1970s people were able to see the geysers coming up through the fog on winter mornings.

"I went overseas for 18 months and when I got back, all these things had stopped.

"Waikite and Papakura geysers had stopped, and for me, this was a wakeup call because they had never been known to stop for a long period."

As a result of the decline, scientists advocated closing down many bores during the 1980s because they were detracting from Rotorua's natural thermal attractions, said GNS science.

They achieved the closure of about 300 bores within a 1.5 km radius of Whakarewarewa, despite strong



The Pohutu Geyser at the Whakarewarewa Thermal Reserve could be re-joined by the Waikite geyser. File photo / supplied

resistance from some bore owners.

Since then, geothermal surface features have returned to the area, said GNS geothermal specialist Duncan Graham.

His colleague Dr Mroczek believed the the decline of the Whakarewarewa geyser field showed the delicate nature of New Zealand's geysers. But, GNS science have pointed out it was now possible to use the geothermal features in a sustainable way.

With careful management and appropriate technologies, you can have both use and protections of the features for the economic benefit of Rotorua and the country, said GNS science.

Mr Graham said the geyser's were important to Rotorua.

"We are all very passionate about the geothermal features.

"When you arrive at one of Rotorua geothermal areas, locals want to talk about they features like they are talking about their family.

"They might say 'Oh Karotiotio [geyser] is getting a bit grumpy, or something like that.

"It's part of the character of Rotorua," he said.

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