Gore District Mayor Ben Bell P O Box 8 Gore 9740

CC:

Deputy Mayor Cr Keith Hovell, Cr Bronwyn Reid, Cr Andrew Fraser, Cr Paul McPhail, Cr Glenys Dickson, Cr Robert McKenzie, Cr Richard McPhail, Cr Joe Stringer, Cr Neville
Phillips, Cr John Gardyne, Cr Stewart MacDonell

4 August 2025

Tēnā koe Mayor Bell,

I am writing to you in regards to nitrate contamination of Gore District Council's drinking water, which recently exceeded the maximum allowable value.

In 2023, Greenpeace Aotearoa ran a public event offering free nitrate tests to the community. At the time, we tested several samples from the Gore town water supply that were above 4 mg/L for nitrate - which was close to the level associated with an increased risk of preterm birth¹ and exceeds the level at which scientists have started seeing an increased risk of bowel cancer.

We issued a press release with these results², and we were quite concerned by subsequent statements from Gore District Council down-playing this risk³. We always communicate an aggregation of the results following our public nitrate testing events so that the wider community is informed and empowered with the knowledge to make the best decisions about their health.

Nitrate contamination in Gore's drinking water has since more than doubled to 11.4 mg/L, exceeding the maximum allowable value for nitrate (MAV). We are writing to once again express our concern following your comments in the media and on the Gore District Council's website stating the current MAV as a "safe level".

The science of nitrate contamination

The current maximum allowable value of 11.3 mg/L has been labelled hopelessly out of date by public health experts⁵. It was set in the 1950s because nitrate concentration

¹ Sherris AR, Baiocchi M, Fendorf S, Luby SP, Yang W, Shaw GM. *Nitrate in Drinking Water during Pregnancy and Spontaneous Preterm Birth: A Retrospective Within-Mother Analysis in California*. May 2021, Link.

² Greenpeace Aotearoa. *Testing finds Gore and Lumsden drinking water near nitrate reproductive risk levels.* April 2023, Link.

³ Gore District Council. Gore Water Nitrate Levels Below National Standards. April 2023, Link.

⁴ Gore District Council. Water Notice. Retrieved 4 Aguust 2025, Link.

⁵ RNZ. Health expert renews call for study on nitrates in drinking water. July 2019, Link.

above this level represents an immediate risk of blue baby syndrome. However, this limit doesn't take into account the growing body of scientific evidence that associates several health risks with much lower levels of nitrate contamination in drinking water.

Even at levels as low as 1 mg/L, long-term exposure to nitrate contamination in drinking water can increase the risk of developing bowel cancer⁶. This risk increases alongside the concentration of nitrate⁷. At levels of nitrate above 5 mg/L, the New Zealand College of Midwives advises pregnant people to consider an alternative source of drinking water, because of an increased risk of preterm birth⁸.

A looming risk for district councils

Everybody no matter where they live should be able to drink the water from their kitchen tap without worrying about getting sick. But for many communities, particularly those in rural areas, this is no longer the case. While most New Zealanders (80%) have access to drinking water that has 1 mg/L or less of nitrate, around 800,000 people could be exposed to hazardous levels⁹.

Gore is not alone. Other towns in Aotearoa have dealt with similar issues with nitrate contamination¹⁰. This can be a challenge for District Councils who are responsible for supplying safe drinking water and must bear the cost to do so, but have limited control over the land use activity that can pollute drinking water sources. The responsibility for protecting the sources of drinking water falls to Regional Councils.

Delaying action to address the sources of nitrate contamination will result in increased costs for District Councils. High nitrate levels have been found in several Selwyn District towns, and estimates indicate a long-term solution to move away from nitrate-contaminated water supplies could cost the Council more than \$400m¹¹.

The evidence is clear that the main source of nitrate contamination is intensive dairying and the overuse of synthetic nitrogen fertiliser. I ask you to engage with the regional

¹¹ Selwyn District Council. *Infrastructure Strategy* 2024-2054. Link.



⁶ Schullehner J, Hansen B, Thygesen M, Pedersen CB, Sigsgaard T. *Nitrate in drinking water and colorectal cancer risk: A nationwide population-based cohort study.* July 2018, Link.

⁷ Temkin A, Evans S, Manidis T, Campbell C, Naidenko O. *Exposure-based assessment and economic valuation of adverse birth outcomes and cancer risk due to nitrate in United States drinking water*. September 2019, <u>Link</u>.

⁸ New Zealand College of Midwives. *Nitrate levels in drinking water: risks for pregnant women and formula-fed babies.* May 2021, Link.

⁹ Richards J, Chambers T, Hales S, Joy M, Radu T, Woodward A, Humphrey A, Randal E, Baker M. Nitrate contamination in drinking water and colorectal cancer: Exposure assessment and estimated health burden in New Zealand. March 2022, <u>Link</u>.

¹⁰ Greenpeace Aotearoa. *Waimate drinking water disaster highlights need to end dairy pollution.* December 2024, Link.

council and central government, to advocate for better protection of drinking water sources, and to seek stricter limits on synthetic nitrogen fertiliser.

We offer a free mail-in service as part of our nitrate testing programme which we invite your community to use - not only for those on your town supply, but for those on private bores, where nitrate contamination is often unmonitored and typically higher than town supplies.

We invite you to join us in addressing nitrate pollution at the source, and to work together to reduce its harm to communities. I am very happy to meet with you to discuss this further and to connect you with experts and scientists working in this field.

Ngā mihi,

Will Appelbe

Freshwater Campaigner

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Greenpeace Aotearoa

