



**Mackenzie**

DISTRICT COUNCIL

# MEMO

**To: Meg Justice, Consultant Planner**

**From: Ashley McLachlan – Manager, Engineering**

**Date: 5<sup>th</sup> April 2024**

**Subject: Plan Change 25 – Lyford Lane zoning**

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My full name is Ashley McLachlan. I am Mackenzie District Council's, Manager, Engineering, a position I have held for one year. I have NZCE (Civil) and Diploma in Highway Technology, along with PRINCE2 project management qualifications.

I have 26 years' experience, which includes Project Management, Programme Management, Branch Management, Development Management and Divisional Management. My experience includes design, construction and asset management of roads, utilities, and structures, as well as mediation and arbitration supervision.

## **Lyford Lane (RLZ-SCA12) (submissions PC25.02, PC25.16 and PC25.21)**

Three submitters<sup>1</sup> oppose the SCA12 – Lyford Lane provisions and seek amendments to the provisions that manage new development within this SCA within the RLZ. Springwater Trust's submission opposes the entire RLZ chapter, as they consider that SCA12 is inconsistent with other areas proposed to be RLZ, as MDC provides no reticulated water services to SCA12 and does not own the essential infrastructure (including the access road and bridge) despite there being existing lots in this area. Springwater Trust seeks that the RLZ Chapter is amended to ensure MDC provide satisfactory drinking water and wastewater reticulation to the 21 lots within SCA12 and that MDC assumes ownership of the roads and bridges servicing this area (2.01). Similarly, Doug and Pam Aitcheson seek confirmation about the services (wastewater and water supply) MDC intend to provide (16.01).

The submission by B.D. and C.B. White has sought the ability to subdivide their land to enable the establishment of four additional dwellings (submission PC25.21). The submitter's land is 158 Lyford Lane (Lot 23 DP 82708 BLKS III VII Strachey SD), and it is 37.8 hectares in area. There are no residential units on the land. While the submitters land is not within the Twizel Water Supply Protection Area (TWSPA), any further development in SCA12, even on land outside the TWSPA, can still pose a risk to water quality as any wastewater system will be upstream of the TWSPA. The protection zone under the National Environmental Standards for Sources of Human Drinking Water requires the Source Water Risk Management Area Zone to be considered in Water Safety Plans, as a requirement of the new Water Services Act 2021, which has extended the protection area by up to 2.5km from the supply bores. This area includes B.D. and C.B. White's land. For these reasons, I do

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<sup>1</sup> Springwater Trust (25.02), Doug and Pam Aitchison (PC25.16) and B.D. and C.B. White (25.21).

not consider that the relief sought in this submission can be supported due to the risk to contamination of the TWSPA<sup>2</sup>.

### Relevant Legislative Instruments in this Context

Bores beside the Frazer River provide Twizel's community drinking water. A drinking water protection zone was established in 2008 and is detailed in Figure 1 under the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007, commonly known as the Drinking Water National Environmental Standards (NES).

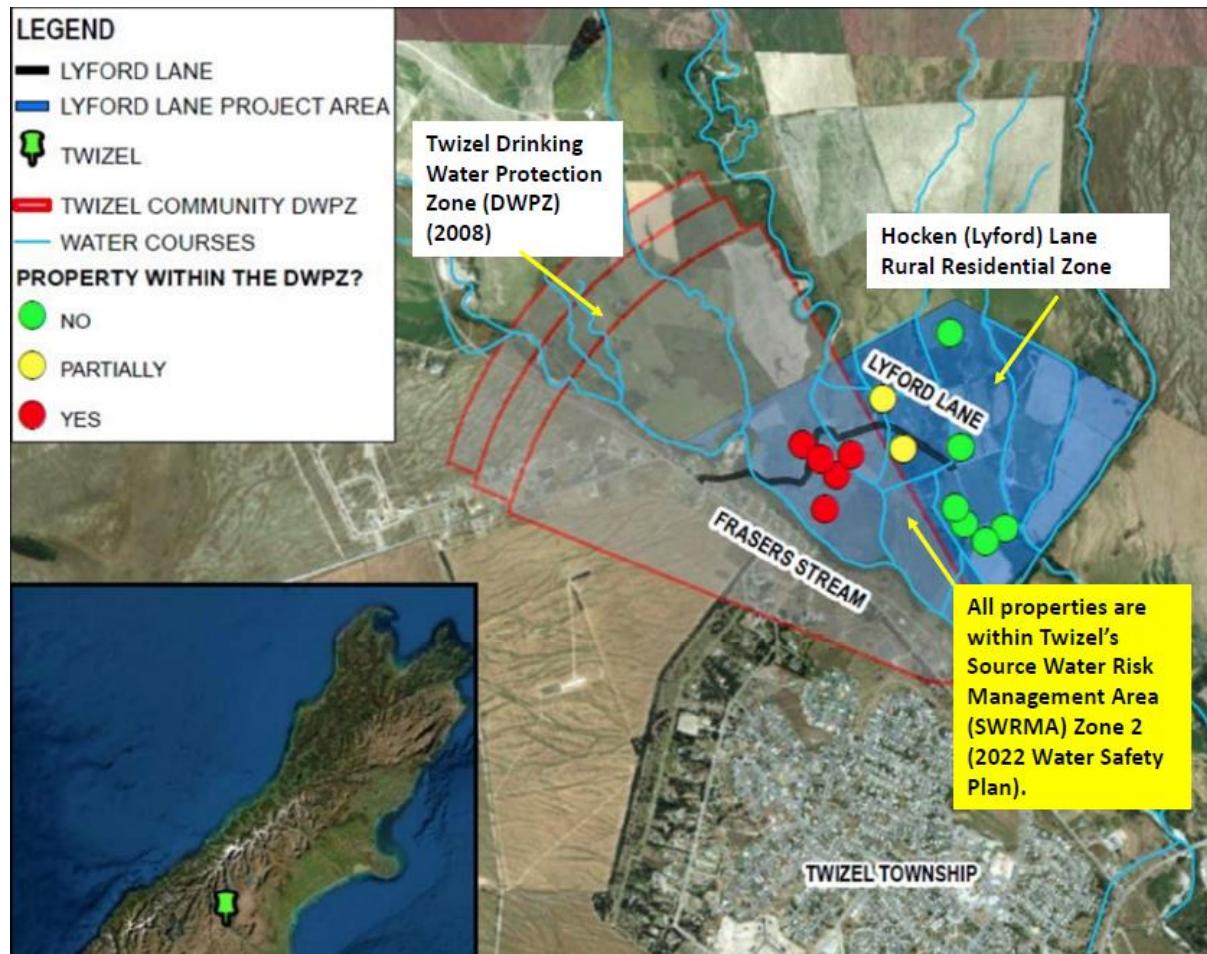


Fig 1 – Drinking water protection zone

In 2021 The Water Services Act (2021), directed that drinking water providers must implement a high standard of care with regards to the protection of source water. In this context, MDC must investigate and implement options for eliminating sources of risk near a protected water source.

September 2023 the Ministry for the Environment published guidelines for delineating source water risk management areas (SWRMA). For Twizel SWRMA 2 is appropriate. This area is defined as land area above where groundwater travels to the intake (well) within a 1-year period, out to a maximum distance of 2.5 kilometres. Figure 2 shows Lyford Lane is within 1.5km of the bores.

<sup>2</sup> This water supply protection area is now labelled the **Twizel Community Drinking Water Supply Protection Area** in the District Plan.



Fig 2 - Source water risk management area (SWRMA2).

### The Risks that Exist

Residential activities create risks to Twizel's water supply that include but are not limited to:

- Development sediment discharges and spills
- Runoff from urban areas can carry pollutants such as heavy metals, oils, and litter into water bodies, impacting water quality.
- Oil and Chemical Spills releases hazardous chemicals from transportation, storage, can contaminate water sources.
- Hazards from chemicals, pesticides, fertilizers, and waste can contaminate water sources.
- Biological Hazards from bacteria, viruses, parasites, and other pathogens can lead to waterborne diseases.
- Physical Hazards such as soil erosion, sedimentation, and habitat destruction can degrade water quality and disrupt ecosystems.
- Nutrient Pollution from excessive amounts of nutrients like nitrogen and phosphorus from wastewater can cause harmful algal blooms and degrade water quality.
- Soil erosion and sediment runoff can cloud water, reduce water clarity, and degrade aquatic habitats.
- Introduction of invasive species into water bodies can disrupt ecosystems, and alter water chemistry.

Increased residential activity within the Lyford Lane development area will introduce direct contamination risks at the source of Twizel's water supply and therefore puts the safety of the aquifer for drinking water at risk.

### **Providing a Public Water Supply to Properties in Lyford Lane and Vesting the Private Road**

The creation of Lyford Land and subdividing of land occurred before the year 2000. The servicing of the developed sections:

- A privately owned road
- Bores for water supply
- Septic tanks to manage sewerage outflows
- No stormwater measures
- No telecommunications

These points are identified on the property LIM's, and owners have purchased properties with that status and at that price point. Properties with greater amenity attract a higher price point.

It would be unjustifiable for all ratepayers to bear the burden of funding amenities primarily benefiting a small subset of the community. Allocating development costs to all ratepayers for the exclusive benefit of a few would establish an unsustainable precedent for the Council, straining financial resources beyond feasibility.

### **Providing a Public Sewer Service for Properties in Lyford Lane**

Nine septic waste systems lie within the Drinking Water Protection Zone (DWPZ) for the Twizel community and the entire Lyford Lane rural residential area lies within the Source Water Risk Management Area, as defined by the **National Environmental Standards for Sources of Human Drinking Water**. The presence of on-site wastewater disposal systems creates a material risk to the raw water quality.

Council designed, priced and consulted residents on the installation of a pumped sewer main along Lyford Lane to replace the septic tanks with a variety of options. A mixed reaction was received and a preferred option identified. Council continues to work with the property owners in Lyford Lane to bring a proposal to Councillors for Council approval.

### **Conclusion**

We strongly oppose any further development along and in the area of Lyford Lane for the reasons laid out above.



Ashley McLachlan  
Manager, Engineering