

Your Comment on the Ōhoka Residential Subdivision

Please include all the contact details listed below with your comments and indicate whether you can receive further communications from us by email to substantive@fasttrack.govt.nz.

1. Contact Details			
Please ensure that you have authority to comment on the application on behalf of those named on this form.			
Organisation name (if relevant)	Melva Averill Leslie & Est of Donald Henry Leslie (Authorised to be submitted by Bruce Leslie)		
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Last name	Leslie		
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Email (a valid email address enables us to communicate efficiently with you)	██████████		
2. We will email you draft conditions of consent for your comment			
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Please provide your comments below, include additional pages as needed.

1. Introduction

The Leslie family have lived in the district since 1964 and previously farmed a large portion of the area proposed for subdivision for nearly three decades.

- The local clay pan has the effect of trapping ground water below the pan and in an average year static well levels on the property sat at about 300mm below ground level, with several active springs on the property which were directed downstream via a series of drains dug on the property to improve the land utilisation.
- The clay pan had the additional effect of holding irrigation water and fertiliser at the level that was useable to pasture and minimising leaching. Meaning the soils were healthy and productive unless abused, with our family using minimal nitrogen fertilisers running a highly productive dairy unit averaging over 600kgMS (Milk Solids) per cow, per year.
- Before it was widely adopted, our milking herd was housed over winter with dry stock relocated to a property in Mandeville as the land was assessed, by us, as too wet to graze without significant pugging and pasture damage.
- Runoff from the dairy and support buildings was pumped to above ground retention ponds to control runoff. **Noting:** That at the date of the submission the Mill Rd dairy shed infrastructure is still onsite with the retention ponds removed and all hard surface run off going direct to ground and into local drains adding to accumulated flood risk.
- We have watched increased development over the years with:
 - Split level houses built on neighbouring properties that have garages below ground level which fill with water for extended periods in high undercurrent* years.
 - Septic tank installations in Keetly Place that soon after construction needed to be redesigned after ground water levels compromised them.
 - The Silverstream development placing a restriction on the catchment's flood capacity, by building a barrier in the flood plain.

“Those who fail to learn from history are doomed to repeat it.”

Consenting through council has repeatedly shown that those building in the district fail to understand the area and repeatedly require additional engineering to provide solutions that may or may not be implemented further added to the flood risk for those downstream.

* **Undercurrent:** Water deposited in shallow aquifers at the foot hills around Oxford and re-emerging on the surface in and around Ohoka (e.g. the pit on the Whites Rd & Tram Rd corner regularly holds undercurrent water which, when high enough, flows out through the drain down Whites Rd). With personal experience saying that the time lag between rain events and undercurrent uprising in the Ohoka area being 2 to 3 weeks depending on intensity.

2. Flooding

It is our family's contention that mitigation of flooding is an unrealistic expectation given the compromised nature of the area:

- High ground water levels and undercurrent springs on the property are unlikely to be engineered out of existence, as noted above. This would also apply to the ability to de-water the ground during construction with undercurrent providing a consistent flow to replace water removed.
- The proposed subdivision sits in the path of the Mandeville resurgence channel ([Mandeville Resurgence Channel Upgrades | Let's Talk Waimakariri](#)). This is a project initiated by the Council in response to significant flooding from rain events on top of a high under current year. To our knowledge no solution has been adopted or funded to resolve the increase run off from the Mandeville subdivision that flows through the proposed Ohoka Residential Subdivision site.
- The downstream flow path is compromised and has been actively throttled by the Silverstream Subdivision reducing the flood capacity of the catchment (see Waimakariri District Council – (Northern Arterial Road) – CRC147665, CRC147666, CRC147667, CRC151940 and RC155004 original opinion attached) Where the construction of the extension of Ohoka Road was approved noting the flooding upstream of the new road would increase due to the flow restrictions introduced by the road and associated bridges.
- Any assessment of flood effects not modelled on high undercurrent years will ultimately create a failure point, as noted above, impacting on the wider flood plain.

3. Infrastructure

Others will address this more extensively but from our knowledge the subdivision would require the addition of sewer capacity as well as other services and roading which, unless a majority of the cost is born by those benefiting, would place an unfair burden of other rate payers.

8. Photos

This Ecan photo shows where any additional water created by upstream Ohoka subdivisions is deposited. With this being taken before the flood plain had its outflow restricted and the photo was submitted as part of submission to the extension of Ohoka Road. The edge of Silverstream is visible at the left of the photo. The

area noted as the Ohoka Basin being a ponding area constrained by flap gates that cannot drain until river levels recede but receiving water from designed (disputed) cutting in the Ohoka stream bank and vulnerable to any miscalculation in runoff mitigation.

