

DISTRICT PLAN REVIEW

Proposed Waimakariri District Plan - Submission

Clause 6 of Schedule 1, Resource Management Act 1991

Submitter details

(Our preferred methods of corresponding with you are by **email** and **phone**).

Full name: _____

Email address: _____

Phone (Mobile): _____ Phone (Landline): _____

Postal Address: _____ Post Code: _____

Physical address: _____ Post Code: _____
(if different from above)

Please select one of the two options below:

I **could not** gain an advantage in trade competition through this submission (go to Submission details, you do not need to complete the rest of this section)

I **could** gain an advantage in trade competition through this submission (please complete the rest of this section before continuing to Submission details)

Please select one of the two options below:

I **am** directly affected by an effect of the subject matter of the submission that:

- A) Adversely affects the environment; and
- B) Does not relate to trade competition or the effect of trade competition.

I **am not** directly affected by an effect of the subject matter of the submission that:

- A) Adversely affects the environment; and
- B) Does not relate to trade competition or the effect of trade competition.

Submission details

The specific provisions of the proposal that my submission relates to are as follows: *(please give details)*

My submission is that: *(state in summary the Proposed Plan chapter subject and provision of your submission. Clearly indicate whether you support or oppose the specific provisions or wish to have amendments made, giving reasons) (please include additional pages as necessary)*

I/we have included: _____ additional pages

I/we seek the following decision from the Waimakariri District Council: *(give precise details, use additional pages if required)*

Submission at the Hearing

I/we wish to speak in support of my/our submission

I/we do not wish to speak in support of my/our submission

If others make a similar further submission, I/we will consider presenting a joint case with them at the hearing

Signature

Of submitters or person authorised to sign on behalf of submitter(s)

Signature _____

Date _____

(If you are making your submission electronically, a signature is not required)

Important Information

1. The Council must receive this submission before the closing date and time for submissions.
2. Please note that submissions are public. Your name and submission will be included in papers that are available to the media and public. Your submission will only be used for the purpose of the District Plan review process.
3. Only those submitters who indicate they wish to speak at the hearing will be emailed a copy of the planning officers report (please ensure you include an email address on this submission form).

If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

Please note that your submission (or part of your submission) may be struck out if the authority is satisfied that at least 1 of the following applies to the submission (or part of the submission):

- It is frivolous or vexatious
- It discloses no reasonable or relevant case
- It would be an abuse of the hearing process to allow the submission (or the part) to be taken further
- It contains offensive language
- It is supported only by material that purports to be independent expert evidence, but has been prepared by a person who is not independent or who does not have sufficient specialised knowledge or skill to give expert advice on the matter.

Send your submission to: Proposed District Plan Submission
Waimakariri District Council
Private Bag 1005, Rangiora 7440

Email to: developmentplanning@wmk.govt.nz

Phone: 0800 965 468 (0800WMKGOV)

You can also deliver this submission form to one our service centres:

Rangiora Service Centre: 215 High Street, Rangiora

Kaiapoi Service Centre: Ruataniwha Kaiapoi Civic Centre, 176 Williams Street, Kaiapoi

Oxford Service Centre: 34 Main Street, Oxford

Submissions close 5pm, Friday 26 November 2021

Please refer to the Council website waimakariri.govt.nz for further updates

Waimakariri District Plan Submission – Additional Information

1. Background of San Dona

San Dona olive groves were established approximately 25 years ago and were considered by WDC to have “Special Character” with an expectation of economic benefit to the property owners. Properties were purchased with the expectation of future revenue from the production of olive oil. WDC approved the development of current lot sizes within a rural zone based on the financial viability of olives. Developers supplied information promising revenue of \$70K + per year by 2007 and stated that future subdivision would more than likely be possible.

The olive trees have not been successful, and the varieties of olive trees planted by the developer were not suited to the geography and climate. Re zoning to Residential Large Lot would enable a more practical use of the land and help meet the shortfalls in residential land supply now and into the future.

Property owners are legally bound to paying Ohoka Utilities for irrigation water that can’t be used efficiently or for its original purpose.

2. Characteristics of San Dona

San Dona does not meet the description or criteria generally attributed to its current zoning. The proposed Rural Lifestyle Zone will have a minimum lot size of 4.0ha. Sand Dona lot sizes are between 1.0 and 1.5ha and is indistinguishable in appearance from other nearby Large Lot Residential subdivisions.

WDC provides all the same amenities:

- Water reticulation
- Sewage reticulation
- Stormwater reticulation
- Rubbish and recycling bins at our gates weekly
- Some street lighting
- A 50kph speed limit in our area
- Predominant activity is living
- Access from zones not from arterial roads
- Opportunity for rural outlook from within the zone
- Detached buildings and other buildings

These amenities are consistent with Residential Large Lot zoning and not common to rural areas.

The location of San Dona, midway between Ohoka Primary school, Swannanoa Primary school and close proximity to Mandeville Sports Centre and Mandeville Village Precinct makes it the logical choice for infill development. The Mandeville Sports Centre has been the hub of the community for local families for many years through

participation in the wide range of sports and events available. The establishment of the Mandeville Village Precinct in recent years has further enhanced the community feel of the area and has given residents a “local” to meet and socialize. Both the Mandeville Sports Centre and the Village Precinct are tagged for future development and will require increased local population to support these developments.

All of Mandeville with the exception of San Dona, is proposed for inclusion in the Large Lot Residential Zone.

Many San Dona property owners have removed their olive trees and the land is largely unproductive and under utilised. Whilst most properties have well established gardens around the dwelling, there are significant areas of bare land with minimal tree planting. Infill housing would result in more tree planting on smaller lots, creating improved plant biodiversity and bird life corridors. In addition to this, shelter belts are well established and a Brown fields development approach is inherently more environmentally sustainable by not encroaching on productive farmland.

3. Stormwater

San Dona stormwater is usually discharged into soak-pits in the ground. There are also open channels which largely contain water draining from aquifers which arrive from the west of the region. Future growth will have some impact on the systems but it will be mitigated by the need to control discharges into the drains.

Flooding in June 2014 impacted a number of properties within and adjacent to the open drainage system. A number of drain improvement projects have subsequently been undertaken to address immediate flooding concerns. These works have largely been funded through a district wide rate. The key issues in the Mandeville area are the insufficient drain capacity for the rural residential areas and resurgent ground water especially in the winter months.

Since the 2014 flooding investigation into drain improvements were carried out. The specific works in San Dona were to the Bradleys Road channel where this drain was made much wider and deeper allowing for a greater volume of water to travel down Bradleys Road and into the Ohoka Stream. The other area of San Dona to have work carried out was to Sienna Place where the roadside drainage has been redefined to allow better flows into the stormwater system.

Projects remaining are a long term solution for managing resurgence flows through the Mandeville area. This will involve stage 1 (2023) an upgrade of the existing drainage network and stage 2 (2025) diversion of the resurgent flow to the old Eyre River Bed.

Clearly any issues the council have with developing San Dona cannot be about Stormwater.

High ground water issues can be mitigated with holding tanks which would be an environmentally sustainable option and potential flood issues can be mitigated with finished floor levels of dwellings.

4. Waste Water

HISTORY

San Dona was originally serviced by a private waste water scheme which was installed by the developer. This scheme was owned by Ohoka Utilities and provided wastewater services to approx. 110 properties.

In August 2011 the council were informed that council planning had approved plan changes for 192 new Residential 4B lots in Mandeville. This was largely in response to the recovery needs from the Canterbury earthquakes. Reports on any spare capacity in the Mandeville; Ohoka Meadows and Swannanoa wastewater schemes showed that this would only temporarily be available and would be a stretch on the schemes.

Consultation with existing ratepayers on the Mandeville; Ohoka Meadows and Swannanoa schemes resulted. Public meetings (not including San Dona) were held. Most were in favour of joining the Eastern District Sewer Scheme (EDSS). In some cases there was to be a significant reduction for the rate payers of the annual waste water rates they would be paying as a result of joining the scheme. A budget of \$2.63M was approved by council to build a pump station on the corner of Bradleys Road and Tram Road and provide a network of drainage pipes in the region. Council had already spent \$300,000 on investigations and design work of what was needed. NB. Ohoka Utilities was a private scheme and negotiations with the developer were still on going. The council decided to make an allowance for the inclusion of San Dona properties anyway.

Mandeville; Ohoka Meadows and Swannanoa schemes were disbanded and the infrastructure was demolished. These properties were on-sold by council and the returns were used to offset the cost of the new Mandeville wastewater plant. The properties were at 442 Mandeville Road; 933 Tram Rd & 31 McHugh Rd.

Council decided the costs of the new waste water scheme would be covered by the residents and developers. All new lots were charged \$6,000 per lot and all current existing scheme members were charged \$600 per lot. In addition there was a standard Development Contribution for connecting into the EDSS of \$2,497. In 2011 there were 410 existing properties to be connected and 380 future properties predicted in Millfield and Braeburn. NB:- 20 Properties in Ohoka Downs decided against connecting to EDSS and still have their own private scheme.

Council staff decided that scheme members on the Mandeville; Ohoka Downs and Swannanoa schemes should not pay the development contribution of \$2,497 as they had originally paid a development contribution to join their local waste water scheme already. These residents enjoyed the benefit of the new wastewater scheme for \$600 with the cost largely borne by developers and the sale of council land.

In the meantime the developer of San Dona was still in negotiations with council over his privately run scheme. The process had become complicated and time consuming. The developer wanted to sell his utility to the council. The council decided to proceed with the new pump station and network anyway and make allowance for the connection of San Dona at a later date.

The Mandeville waste water pump station was eventually built and commissioned sometime in 2012

San Dona did eventually join the scheme sometime later in 2016 but the members were forced to pay both the \$600 connection fees and the cost to buy out the developer. Some San Dona residents are still paying this off. The developer had also convinced the council to rezone several sections he had left over to be much smaller than the average San Dona size.

Rate payers in Mandeville all pay \$100 per year to enable their septic tanks to be pumped out every year. Incidentally the amount recovered each clean is nowhere near what was expected.

MANDEVILLE AREA SEWERAGE SYSTEM

When the subdivision of Mandeville occurred developers installed Septic Tank Effluent Pumping (STEP) systems and low pressure waste water reticulation to service each sub-division. This is all now linked to a new central collection point (Bradleys Road pump station) from where it is pumped to the Rangiora waste water treatment plant. The Mandeville waste water scheme currently services around 600 properties as well as a large sports facility and several commercial/industrial areas. The WDC operated reticulation system comprises approximately 30km of pressure sewer pipe. Septic tanks, pumps and associated infrastructure are the responsibility of each property.

A STEP system requires each property to have a septic tank. These are typically concrete and provide primary treatment and attenuation. Waste water from the dwelling is generally discharged into the tank by gravity drains. The solids settle out and accumulate at the bottom. The liquid portion of the wastewater is pumped into the pressurised community wastewater reticulation system. The solids are removed from the tank on a regular basis.

MANDEVILLE SEWERAGE ISSUES

Flat topography, fluctuating ground water levels and prolonged rainfall provide significant risks to the Mandeville wastewater system. The 2014 event resulted in inundation of the waste water system causing loss of service and wastewater overflows. The result of this was many concrete tanks were found to be cracked or their inspection manholes were too low. This allowed the ingress of both ground water and surface flood water. The septic tank pumps worked for much longer extended periods discharging the stormwater and diluted wastewater into the reticulated system. This had a significant effect on the capacity of the Mandeville wastewater

network. This needs to be addressed as this has a major effect on the future growth of Mandeville.

It is believed that some of the older dwellings within Mandeville have their stormwater downpipes feeding into their septic tanks. This is illegal now but is an issue which does still exist where pumping station data still shows significant increases in flow rates after rainfall in the area. All the San Dona units were checked and the required repairs and modifications were carried out.

There is a potential for private waste disposal units being installed (not allowed). This puts extra pressure on the wastewater system.

At this stage the wastewater system in Mandeville is all relatively new and is expected to last much longer than another 50 years without much maintenance.

Other issues which may affect development within San Dona:

- Size of lateral pipes feeding from the property into the main.
- Some part of San Dona have brittle PVC pressure pipes with a shorter life span.
- Some laterals are very deep greater than 1.4m.
- Some have non-standard pumps
- Some have non-standard boundary boxes with no shut off valves

None of these would prohibit development within San Dona but would need to be mitigated with only a small part of San Dona being affected.

WAY FORWARD FOR SAN DONA

In 2017 the council completed a “Mandeville Wastewater Study” to investigate future servicing options and methods to improve system performance. A current study is still in draft form and is not yet available. This would be extremely useful to obtain a copy of.

The study identified the biggest issue is the stormwater entering the system and impacting on capacity and performance.

In summary the report recommends retaining the existing septic tank systems but retrofitting a “High Head Low flow pump”. This would essentially convert the system to a conventional pressure sewer system with increased storage and would improve system performance and flexibility. This option would require tank testing, main sizing and additional alterations to achieve implementation. It would allow for more pumps to be connected to network. NB: The current pumps in use are “Low Head High flow” types. A High Head Low flow pump

New additions to the network could use telemetry and controls to allow wastewater flow from the property only when the pump station levels are low.

New additions could also use prefabricated plastic tanks which are less prone to fracturing.

New additions to have approved boundary kits to allow for shut-off valves.

Work currently being done by council:

- All lateral sizes being confirmed and documented
- All pumps to be surveyed
- Determine if waste disposal units are installed
- Undertake survey to determine storm water discharging
- Install pressure relief valves at intermediary high points.
- Create distinct zone with flow meters and valves to obtain more accurate data for modelling
- Develop pipeline replacement of Brittle PVC pipes in San Dona.

Council are now in receipt of waste water modelling for the region which has been carried out this year. This should be readily available and which will show that the San Dona area has no issues and the San Dona waste water system is in a good state with room for expansion. The council are predicting the property growth in Mandeville to increase from around 600 properties presently to approx. 900 in 30 years. Current growth in this area suggests expansion will be much stronger than this.

5. Potable Water Supply

The San Dona development was originally serviced by it's own well but is now connected to the WDC owned Mandeville – Fernside water supply scheme. This is a restricted water supply and is situated at the corner of Tram Rd and Two Chain Road. The primary source is from a 77 metre deep well. There is a second well at this site which is now only used as a backup source. An ultraviolet disinfection system was installed in 2017 to achieve compliance with both bacterial and protozoal requirements of the DWSNZ. Fernside was added to the scheme in 2018 when the original Fernside scheme was found to be non compliant.

Facts

Storage = 4 x 30,000 liter tanks

Value = \$10.1M

No. connections = 964

Average Daily flow = 1,321 m³/day

Peak Daily flow = 1,863 m³/day

Resource consent expires = 22/12/2039 (3,024m³/day)

Average daily flow per connection = 1,429 L/day/connection (1.429 m³/day)

Asset condition = very good 62% good 29%

The demand on the scheme is expected to increase by 17% in 10 years. There is sufficient capacity to meet current demands. However source upgrades have been scheduled in 2024 (for and additional 35 L/s) and 2033 (for and additional 25 L/s).

A new 500m³ reservoir is scheduled for construction in 2021/22 to replace the existing 4 tanks. This will be built to meet storage requirements for the existing scheme and beyond the next 50 year period.

“The capacity of the water supply headworks and reticulation has been assessed using an uncalibrated but verified reticulation model. The model and associated monitoring has confirmed that the existing reticulation system has adequate capacity for the existing and future demands.” WDC Activity Management Plan 2021 Mandeville Fernside Water Supply Scheme.

6. Summary

Key points for inclusion of San Dona in Residential Large Lot Zone

- Location in close proximity to two primary schools, Mandeville Sports and Mandeville Village precinct makes San Dona a logical choice for inclusion Residential Large Lot Zone
- Significant areas of under utilised land that could help meet demand for residential land now and into the future
- San Dona does not meet the description or criteria generally attributed to its current zoning.
- San Dona already has characteristics of Residential Large Lot Zone
- Brown fields development approach does not impact on productive farmland
- Infilling would enhance existing community feel
- Close proximity to Christchurch would be desirable for those seeking rural lifestyle but with manageable sized properties
- Storm water, waste water and potable water supply concerns expressed by WDC can be readily mitigated