

## Appendix 9: Assessment of Canterbury Land and Water Regional Plan (LWRP)

The following is an assessment of the activities and associated rules contained in the LWRP of direct relevance to the proposed Plan Change:

### On-site wastewater treatment and disposal

Rule 5.8 identifies “the discharge of wastewater from a new, modified or upgraded on-site domestic wastewater treatment system onto or into land in circumstances where a contaminant may enter water” as a permitted activity, provided the following conditions are met:

Permitted Activity Condition	Compliance
1. The discharge volume does not exceed 2 m <sup>3</sup> per day;	This criterion will apply to any future dwelling on the application site and can be complied with.
2. The discharge is onto or into a site that is equal to or greater than 4 hectares in area;	The combined area of the Plan Change application site complies with this requirement, however if discharge consents are sought on an individual basis it will not. Discharge consent for a restricted discretionary activity would be required for any future subdivision within the Plan Change area.
2a. The discharge is not located within an area where residential density exceeds 1.5 dwellings per hectare and the total population is greater than 1000 persons; and	The residential density of the Living 1 Zone exceeds 1.5 dwelling per hectare and the 2016 estimated population for Kirwee is 1,174 persons. Any future subdivision of the application site will require a discharge consent as a restricted discretionary activity for provision of on-site wastewater disposal to ground.
3. The discharge is not onto or into land:	There is currently no sewerage network available in Kirwee.
(a) where there is an available sewerage network; or	
(b) that is contaminated or potentially contaminated; or	The application site has not been identified as contaminated or potentially contaminated.
(c) that is listed as an archaeological site; or	There are no archaeological sites or areas of interest identified on the application site.
(d) in circumstances where the discharge would enter any surface waterbody; or	There are no surface water bodies in the vicinity of the application site.
(e) within 20 m of any surface waterbody or the Coastal Marine Area; or	Neither of these are applicable to the application site.
(f) within 50 m of a bore used for water abstraction; or	A utility allotment is identified within the Plan Change area and is intended to provide for a future water supply bore. The approved subdivision identifies the areas which wastewater cannot be discharged in compliance with this rule and the existing wastewater discharge consents for the site.
(g) within a Community Drinking-water Protection Zone as set out in Schedule 1; or	The application site is not currently within a Community Drinking-water Protection Zone.

(h) where there is, at any time, less than 1 m of vertical separation between the discharge point and groundwater; and	The geotechnical report prepared for the site states groundwater levels in the area are in the order of 24 m below ground level and on the site itself are in excess of 15 m.
4. The treatment and disposal system is designed and installed in accordance with Sections 5 and 6 of New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management;	Any new on-site wastewater treatment and disposal system installed in future would have to comply with the standards applicable at the time.
5. The treatment and disposal system is operated and maintained in accordance with the system's design specification for maintenance or, if there is no design specification for maintenance, Section 6.3 of New Zealand Standard AS/NZS 1547:2012 – On-site Domestic Wastewater Management;	Any new on-site wastewater treatment and disposal system installed in future would have to comply with the standards applicable at the time.
7. The discharge does not result in wastewater being visible on the ground surface; and	Given the drainage capability of the soils at Kirwee any future on-site wastewater disposal on the application site could comply.
8. The discharge does not contain any hazardous substance.	Proposed on-site wastewater discharge would be from treated domestic water only.

The above requirements for a permitted activity cannot be met by any future allotment created within the application site under the proposed zoning due to the allotment sizes being less than 4 ha and this would require consent a restricted discretionary activity. Given the soils of the application site and the depth to groundwater and the granting of discharge consents associated with the existing development in the northern portion of the application site, gaining the required discharge consents for any future subdivision of the application site is achievable.

It is considered all of the other requirements with respect to the discharge of waste-water to land as a permitted activity can be achieved by any future development and therefore gaining of consent is not considered an impediment. Given the above assessment it is anticipated any future on-site wastewater systems for the Plan Change area can gain consent as a restricted discretionary activity.

## Stormwater

Rule 5.96 identifies "The discharge of stormwater, other than into or from a reticulated stormwater system, onto or into land where contaminants may enter groundwater is a permitted activity, provided the following conditions are met":

Permitted Activity Condition	Compliance
1. The discharge is not from, into or onto contaminated or potentially contaminated land; and	The application site is not identified as contaminated or potentially contaminated.
2. The discharge:	
(a) does not cause stormwater from up to and including a 24 hour duration 10% Annual Exceedance Probability rainfall event to enter any other property; and	Any future stormwater discharge from the Plan Change site can be designed to meet this requirement.
(b) does not result in the ponding of stormwater on the ground for more than 48 hours, unless the pond is part of the stormwater treatment system; and	Any future stormwater discharge from the Plan Change site can be designed to meet this requirement.
(c) is located at least 1 m above the seasonal high water table that can be reasonably inferred for the site at the time the discharge system is constructed; and	Groundwater is typically deep in Kirwee and any future development can comply with this requirement.
(d) is only from land used for residential, educational or	Any future development of the application site will likely

rural activities; and	comply with this requirement.
(e) does not occur where there is an available reticulated stormwater system, except where incidental to a discharge to that system; and	There is no reticulated stormwater at Kirwee.
(f) is not from a system that collects and discharges stormwater from more than five sites.	Any future residential use in the plan change area would likely use individual on-site wastewater treatment and disposal systems for only one dwelling and can comply with this requirement.

The application site is not identified as contaminated land. The other more detailed elements of the permitted activity status of this activity can be accommodated by appropriate design at the time of any future subdivision and or residential use of the plan change area. There are considered to be no serious impediments to any future residential use of the application site being able to comply as a permitted activity with respect to the discharge of stormwater to land.

Given the above assessment any future subdivision of the application site can likely comply with the requirements of a permitted activity as above.