



Recommendation and decision on notification of resource consent application(s) under sections 95-95G of the Resource Management Act 1991 (RMA)

Summary

I recommend the application is processed on a publicly notified basis. This is because:

- The adverse effects on groundwater quality when seen through the lens of the policies and objectives of the pSWLP are likely to be more than minor.

The application

Particulars

Applicant:	Pyper's Produce Ltd
Application reference:	APP-20191110
Site address or location:	1035 Lochiel Branxholme Road
New consent(s) for new activity(ies) (s88)	<input type="checkbox"/>
New consent(s) for existing activity(ies) (s88)	<input checked="" type="checkbox"/>
Change to conditions of existing consent(s) (s127)	<input type="checkbox"/>

The proposal

Pyper's Produce is a vegetable growing and processing operation which specialises in root vegetable production such as potatoes and carrots. It is located 16 km north of Invercargill, and 1.6km to the west of the Oreti River. The applicant also leases adjoining properties for cropping. The applicant currently operates under Discharge Permit (AUTH-205660-V1) to discharge vegetable wash water to land via a soak hole. There is an existing Water Permit (205659) to take up to 380m³/day.

The application site falls within the Lower Oreti Groundwater Management zone and the Lower Oreti Surface Water Management Zone, and Spring fed for water quality and Lowland for water quantity. The Catchment boundary is Makarewa and the Catchment is the Oreti. The Freshwater Management Unit is Oreti. The Tomoporakau Creek flows through the property.

The application seeks:

- To discharge up to 380m³ of horticulture wash water daily onto and into land in circumstances where it may enter water; and
- To abstract and use of 380,000 litres/day of groundwater.

There are existing storage ponds which are designed to allow wastewater to be discharged through infiltration/soakage. No changes to these ponds are proposed as part of this application.

Vegetable wash water discharge

The applicant seeks to discharge up to 380m³ of wash water per day onto and into land in circumstances where it may enter water. The discharge is to occur through the base of settling ponds and via an irrigation system to land. The discharge is not increasing from that previously authorised.

The vegetable wash involves the removal of soil from the vegetables through washing via water jets and tumblers. Once the wash water becomes laden with sediment it must be removed to the storage ponds. The location of the settling pond, soakage pits, groundwater bore (E46/0489), monitoring bore (E45/1007) and Tomoporakau Creek which flows through the property is depicted below:

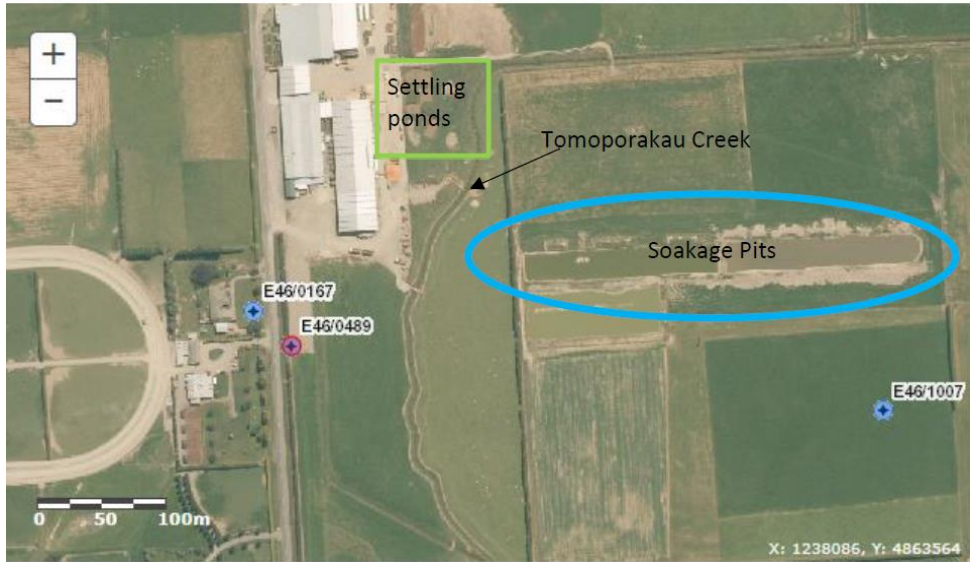


Figure 1: Image taken from the application showing the location of the bores, Tomoporakau Creek and the ponds used for the discharge of vegetable wastewater.

The ponds are unlined and are designed to enable the vegetable wastewater to infiltrate through the soil profile and discharge back into groundwater. The ponds originally consisted of six smaller ponds giving a volume of 17, 550m³, however large banks were created around the existing ponds to create three large settling ponds as shown in Figure 1 above.

Soil and sediments are cleaned out of the initial settling pond as required, which the applicant has advised is monthly during peak season and is stockpiled onsite. Irrigation of wash water to land occurs approximately once every two years and is undertaken over summer. When the pond is empty of water the pond is excavated of any further sediments which are also stockpiled. The wastewater is discharged via a low rate pod system to a discharge area of approximately 85 ha and includes adjoining properties. The applicant has advised that the discharge will only occur when ground conditions are suitable and that there will be no discharge of wash water directly to surface water e.g. through ponding or run-off.

The proposed discharge areas comprise of a few different titles and property owners and the areas are depicted below and are described in more detail within the application.

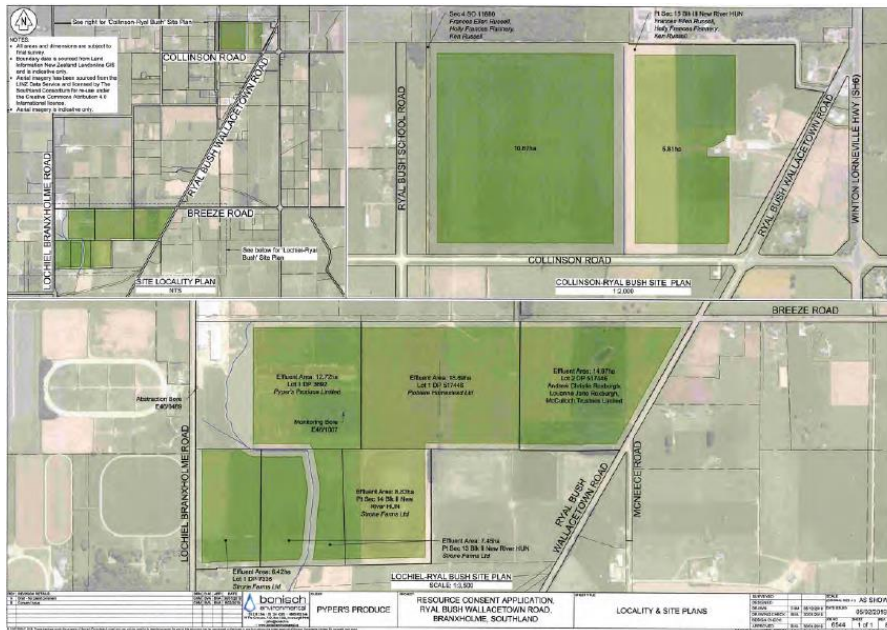


Figure 2: Proposed discharge areas as submitted with the application

The vegetable discharge content wash water consists of soil particles, sediment and sanitisers. The sanitiser used prevents contamination by any microbes in the water. Sanitisers used are HSNO approved. The applicant has advised they operate within the best practice guidelines specified by Horticulture New Zealand and they meet the required industry standards for sanitiser use.

The volume of discharge is approximately 380m³/day. This is based on washing produce for approximately 10 hours/day, 5 days/week for 50 weeks/year. The wash water that will not be discharged through the base of the ponds would be discharged via low rate pods, tanker and transportable pump.

Groundwater abstraction

The applicant seeks to abstract and use up to 380, 000 litres/day of groundwater from Bore number E46/0489. The bore depth is 16m. The take is not increasing from that previously authorised. The maximum rate of take is:

- up to 11 litres per second;
- 380m³/day
- 1,900m³/week
- 7,600m³/month
- 95, 000m³/year

The volume sought is based on taken water to wash produce for approximately 10 hours/day, 5 days/week for 50 weeks/year. There is 140m³ of water storage tanks on site. There is a telemetry water metering system installed.

The applicant seeks a 20-year consent term.

	RWP	Activity Status	pSWLP	Activity Status
Water permit	Rule 23(d)	Discretionary activity	Rule 54(d)	Discretionary activity
Other Agricultural			Rule 39	Discretionary Activity

effluent disposal				
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Overall, the application is a **discretionary activity**.

Abbreviations

RWP – Regional Water Plan (2010)

pSWLP – Proposed Southland Water and Land Plan (2018)

RMA – Resource Management Plan 1991

Public notification consideration

1. Is notification mandatory?

1.1	Has the applicant requested that the application be publicly notified? (s95(3)(a))	<input type="checkbox"/> Yes	Application must be publicly notified. Go to 10.2
		<input checked="" type="checkbox"/> No	Go to 1.2
1.2	Was further information, or commissioning of a report, requested under s92?	<input checked="" type="checkbox"/> Yes	Go to 1.3
		<input type="checkbox"/> No	Go to step 2.1
1.3	If yes, was the request refused, or did the applicant fail to respond or fail to provide the information by the deadline?	<input type="checkbox"/> Yes	Public notification is required by s95C. Go to 10.2
		<input checked="" type="checkbox"/> No	Go to step 2.1

2. Is notification precluded?

2.1	Is each activity subject to a rule or NES that precludes public notification?	<input type="checkbox"/> Yes	Rule(s): enter rule Go to 4.1
		<input checked="" type="checkbox"/> No	Go to step 2.2
2.2	Is each activity a controlled activity?	<input type="checkbox"/> Yes	Application must not be publically notified unless there are special circumstances. Go to 4.1
		<input checked="" type="checkbox"/> No	Go to 2.3
2.3	Is each activity a residential activity and a discretionary activity or a restricted discretionary activity?	<input type="checkbox"/> Yes	Application must not be publically notified unless there are special circumstances. Go to 4.1
		<input checked="" type="checkbox"/> No	Got to 3.1

3. Is notification required?

3.1	Are any of the activities subject to a rule or NES that requires notification?	<input type="checkbox"/> Yes	Application must be publicly notified. Go to 10.2
		<input checked="" type="checkbox"/> No	Go to 3.2
3.2	Will the activity have, or is it likely to have, adverse effects on the environment that are more than minor? (see Note)	<input checked="" type="checkbox"/> Yes	Application must be publicly notified. Complete 3.3 and go to 10.2
		<input type="checkbox"/> No	Complete 3.3 and go to 4.1.

Note: In forming this opinion (a) to (e) apply:

- (a) we must disregard any effects on persons who own or occupy the land on which the activity will occur or any land adjacent to that land (section 95D(a));
- (b) we may disregard an adverse effect of the activity if a rule or NES permits an activity with that effect (subject to Policy 36 of the pSWLP) (95D(b));
- (c) in the case of a restricted discretionary activity, we must disregard any adverse effects that do not relate to the matters over which the rule or NES restricts discretion (95D(c));
- (d) we must disregard trade competition and the effects of trade competition - 95D(d); and
- (e) we must disregard any effect on a person who has given written approval - 95D(e)

3.3 Reasons adverse effects on the environment are less than minor / minor / more than minor

The existing environment

Groundwater quality within the wider catchment is degraded in areas, with some bore monitoring showing high groundwater nitrates. Technical comments outline that the monitoring results from bore E46/1007 (immediately south-east of the ponds) show excessive groundwater nitrogen contamination. The sample on the 26th of November 2018 returned a total oxidised nitrogen concentration of 11.49 mg/L, this exceeds the NZ drinking water standard.

The existing effluent area on the Pyper's Produce Land is approximately 12.72 ha. The wastewater from the vegetable wash is discharged into existing unlined ponds, designed to enable wastewater to infiltrate through the soil profile and discharge back into groundwater.

The resource consents for the current discharge and water take are due to expire and therefore these activities do not form part of the exiting environment for the purposes of this assessment. Rather, the environmental effect of the water take and wastewater discharge are to be assessed afresh.

The surrounding land is rural in nature. There are four additional property owners (total of seven separate titles) where vegetable wash water is proposed to be discharged. These properties are described in detail in the application.

Adverse effects of the proposed activities on the environment

Consideration has been given to the following effects:

Vegetable wash discharge:

- water quality, including potential for contamination of groundwater and surface water, and effects on sources of human drinking water;

Groundwater abstraction:

- aquifer storage volumes
- stream depletion
- existing bores, well yields and wetlands;

Vegetable wash discharge

Effects on water quality, including potential for contamination of groundwater and surface water, and effects on sources of human drinking water

Potential adverse effects of discharging vegetable wash onto land where it may enter water includes contamination of groundwater and contamination of surface waterways.

The ponds subject to this application are designed to enable the vegetable wastewater to infiltrate through the soil profile and discharge back into groundwater. I consider that it is likely the adverse environmental effect of this part of the discharge will be more than minor.

The applicant proposes to increase the vegetable wash land irrigation discharge area from approximately 12.72 ha to have an increased total disposal area of up to 85.79 hectares.

There will be no direct discharge of vegetable wash water to surface water. This wash water would largely be irrigated via a low rate pod system, and this is normally undertaken every two years when ground conditions are suitable for irrigation and to ensure there is no runoff. The discharge of vegetable wash water on the Collinson Road would occur via a tanker and portable pump.

The wash water to be discharged includes soil particles and sediment as well as the sanitisers that are used as part of the washing process.

Technical comments were sought to consider environmental effects from the sanitisers which determined that effects are likely to be less than minor. It is noted that the effects are somewhat self-regulated as over-dosing would result in negative effects to the vegetables.

Groundwater abstraction:

Effects on aquifer storage volumes

The application seeks to abstract up to 380m³/day of groundwater from the Lower Oreti Groundwater management zone. Technical comments have advised that the proposed take has been assessed as sustainable in terms of rate and quantity. The applicant has advised that there is an existing telemetry water meter installed. Accordingly, there is allocation available, so effects on aquifer storage volumes are considered to be no more than minor.

Effects on stream depletion

The closest surface water body to the bore (E46/0489) is the Tomoporakau Creek which is approximately 90 metres to the east so the potential for stream depletion from the proposed abstraction must be considered.

Technical comments identify that hydraulic connectivity, without considering the return of the soakage water would be assessed as moderate under the pSWLP meaning allocation of Tomoporakau Creek would be considered. Stream depletion of Tomoporakau Creek is estimated to be <2L/s, in part due to return of the abstracted water to groundwater via the soakage pits. Therefore, effects from stream depletion are considered to be no more than minor.

Effects on existing bores, well yields and wetlands

Pumping groundwater from a bore can result in reduction in the groundwater level of nearby wells that are positioned within the same aquifer, being the Lower Oreti. No wetlands are within the vicinity of the site. Technical comment on the potential well interference effects outlined that bore drawdown is within acceptable limits. Therefore, effects on existing bores, well yields and wetlands are considered to be no more than minor.

Adverse effects that have been disregarded

Written approval has been obtained from:

- N Pyper;
- M McCallum, Strone Farms Ltd;
- K & F Russell Family Trust; and
- A & L Roxburgh.

Adverse effects on these people have been disregarded.

Planning provisions (policies and objectives) relevant to adverse effects

The relevant regional plans are the Regional Water Plan 2010 (RWP) and the proposed Southland Water and Land Plan 2018 (pSWLP 2018). In addition, Te Tangi a Tauria, the Iwi Management Plan, is relevant for this application as it identifies tangata whenua values and beliefs.

Regional Water Plan (RWP)

Objective 2 Maintain water quality

Objective 8 Drinking Water Standard

Objective 9B Human Health

Policy 1A Take into account Iwi Management Plans

Policy 25 Adverse effects arising from point source and non-point source discharges

Proposed Southland Water and Land Plan (pSWLP)

Objective 6 There is no reduction in the overall quality of freshwater, and water in estuaries and coastal lagoons, by:
(a) maintaining the quality of water in waterbodies, estuaries and coastal lagoons, where the water quality is not degraded; and
(b) improving the quality of water in waterbodies, estuaries and coastal lagoons, that have been degraded by human activities.

Objective 13B The discharges of contaminants to land or water that have significant or cumulative adverse effects on human health are avoided.

Objective 18 All activities operate in accordance with “good management practice” or better to optimise efficient resource use, safeguard the life supporting capacity of the region’s land and soils, and maintain or improve the quality and quantity of the region’s water resources.

Policy 2 Take into account iwi management plans

Policy 13 Management of land use activities and discharges

Policy 15A Maintain water quality where standards are met

Policy 15B Improve water quality where standards are not met

Policy 20 Management of water resources

Section 3.5.10

Policy 3 Protect and enhance the mauri, or life supporting capacity, of freshwater resources throughout Murihiku.

Section 3.5.12

Policy 3 Consider any proposed discharge activity in terms of the nature of the discharge, and the sensitivity of the receiving environment.

Conclusion: significance of adverse effects on the environment

The objectives and policies listed above have been used to inform and determine the level of adverse effects associated with the proposed activity.

Objective 6 of the pSWLP requires that there is no reduction in the overall quality of freshwater and water in estuaries and coastal lagoons, by (a) maintaining water quality where it has not been degraded and by (b) improving the quality of water that has not been degraded by human activities.

Policy 15A requires that water quality is maintained where standards are met, and under Policy 15B that water quality is improved where standards are not met. Under these policies, for any replacement of an expiring discharge permit, it is required to be demonstrated that adverse effects of the discharge are avoided (where practicable), remedied or mitigated.

Bore monitoring results show groundwater nitrogen contamination within the Catchment and I consider that groundwater quality is an effect to address with this application.

The discharge to groundwater from the pond system proposed in the application is likely to be a source of direct contamination of groundwater where it is already elevated with contaminants. This is proposed to occur within a policy framework where water quality, where degraded, is required to be improved.

Overall, I consider that the adverse effects from the application will likely be more than minor.

Recommendation and decision

10. Officer's recommendation

10.1	The application be processed non-notified	<input type="checkbox"/>
10.2	Public notification is required/recommended	<input checked="" type="checkbox"/>
10.3	The application be placed on hold while the applicant tries to obtain written approvals from the affected persons	<input type="checkbox"/>
10.4	Limited notification is required. Persons to be served notice are those listed in 8.2	<input type="checkbox"/>



Sonya Nicol
Consultant Planner
Date: 4 June 2019

Decision under Delegated Authority

11.1	I agree with the recommendation	<input checked="" type="checkbox"/>
11.2	The application will be processed non-notified	<input type="checkbox"/>
11.3	The application will be publicly notified	<input checked="" type="checkbox"/>
11.4	The application shall be placed on hold while the applicant tries to obtain written approvals from the affected persons	<input type="checkbox"/>
11.5	The application will be limited notified. The parties to be served notice are those listed in section 8.2	<input type="checkbox"/>

This decision is made under delegated authority by:



Michael Durand
Consents Manager

Date: 5/6/19