Cold Creek Community Water Supply Ltd

Monitoring Programme
Annual Report
2022-2023

Technical Report 2023-75





Taranaki Regional Council Private Bag 713 Stratford

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Executive summary

The Cold Creek Community Water Supply Ltd (CCCWSL) operates a rural water supply scheme located on Cold Stream, Kiri Road, in the Taungatara Catchment. Water is abstracted from the stream via a gravity fed intake screen on a weir. The water is passed to a treatment plant where it is filtered and chlorinated. There is a backwash/settling pond that discharges back into the Cold Stream.

This report for the period July 2022 to June 2023 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess CCCWSL's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the Company's activities.

During the monitoring period, CCCWSL demonstrated a good level of environmental performance and high level of administrative performance.

CCCWSL holds one resource consent, which allows the take and use of water, one consent to discharge filter backwash into a stream, and one consent to maintain a weir. These consents include a total of 24 conditions setting out the requirements that the Company must satisfy.

The Council's monitoring programme for the year under review included one inspection, two water samples collected for physicochemical analysis, two biomonitoring surveys of receiving waters, and a review of water abstraction and stream flow data.

The monitoring showed that CCCWSL generally complied with their consent conditions in regards to discharge standards and abstraction rates. In comparison to previous years, the monitoring indicated that CCCWSL's compliance with abstraction rate limits had declined slightly. The maximum abstraction limit was exceeded for an extended period of time in order to maintain water supply for consumers on two occasions when pipes had burst. This was recorded as a non-compliance in respect to the resource consent, and an Abatement Notice was subsequently issued. The environmental effects were likely to have been minimal due to the high flows at the time.

Chemical sampling of discharges and receiving waters and macroinvertebrate surveys indicated that the water supply schemes were not causing any adverse environmental effects.

For reference, in the 2022-2023 year, consent holders were found to achieve a high level of environmental performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (<1%) achieved a rating of poor.

In terms of overall environmental and compliance performance by the consent holder over the last several years, this report shows that the consent holder's performance remains at a good level in the year under review.

This report includes recommendations for the 2023-2024 year, including a recommendation relating to an optional review of consent 1134-3.2 in June 2024.

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1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is for the period July 2022 to June 2023 by the Council describing the monitoring programme associated with resource consents held by the Cold Creek Community Water Supply Ltd (CCCWSL). The Company operates a rural water supply scheme situated on Kiri Road, Opunake.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by CCCWSL that relate to abstractions and discharges of water in the Taungatara catchment. This is the sixth annual report to be prepared by the Council to cover the CCCWSL's water abstraction, discharge, structure and their effects. Previously this activity was reported in the joint South Taranaki Water Supplies report.

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about:

- consent compliance monitoring under the Resource Management Act 1991 (RMA) and the Council's obligations;
- the Council's approach to monitoring sites though annual programmes;
- the resource consents held by the Company/companies in the Taungatara catchment;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted in the Company's site/catchment.

Section 2 presents the results of monitoring during the period under review, including scientific and technical data.

Section 3 discusses the results, their interpretations, and their significance for the environment.

Section 4 presents recommendations to be implemented in the 2023-2024 monitoring year.

A glossary of common abbreviations and scientific terms, and a bibliography, are presented at the end of the report.

1.1.3 The Resource Management Act 1991 and monitoring

The RMA primarily addresses environmental 'effects' which are defined as positive or adverse, temporary or permanent, past, present or future, or cumulative. Effects may arise in relation to:

- a. the neighbourhood or the wider community around an activity, and may include cultural and socialeconomic effects;
- b. physical effects on the locality, including landscape, amenity and visual effects;
- c. ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
- d. natural and physical resources having special significance (for example recreational, cultural, or aesthetic); and
- e. risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' in as much as is appropriate for each

2

activity. Monitoring programmes are not only based on existing permit conditions, but also on the obligations of the RMA to assess the effects of the exercise of consents. In accordance with Section 35 of the RMA, the Council undertakes compliance monitoring for consents and rules in regional plans, and maintains an overview of the performance of resource users and consent holders. Compliance monitoring, including both activity and impact monitoring, enables the Council to continually re-evaluate its approach and that of consent holders to resource management and, ultimately, through the refinement of methods and considered responsible resource utilisation, to move closer to achieving sustainable development of the region's resources.

1.1.4 Evaluation of environmental performance

Besides discussing the various details of the performance and extent of compliance by the consent holders, this report also assigns a rating as to each Company's environmental and administrative performance during the period under review. The rating categories are high, good, improvement required and poor for both environmental and administrative performance. The interpretations for these ratings are found in Appendix II.

For reference, in the 2022-2023 year, consent holders were found to achieve a high level of environmental performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (<1%) achieved a rating of poor.¹

1.2 Process description

Cold Creek Community Water Supply Ltd's (CCCWSL) rural water supply scheme covers 7,700 ha. It supplies water to around 15 dairy farms, 20,000 cows, 350 people as well as a number of smaller farms (Figure 1). Water is abstracted from the Cold Stream via gravity fed intake screen on a weir (Photo 1). The water is passed to a treatment plant where it is filtered and then chlorinated. The sand filter is backwashed approximately every nine hours to settling ponds that discharge back into Cold Stream. Water usage includes dairy shed operations, stock watering, and domestic use.

he Council has used these compliance grading criteria for more than 19 years. The

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¹ The Council has used these compliance grading criteria for more than 19 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

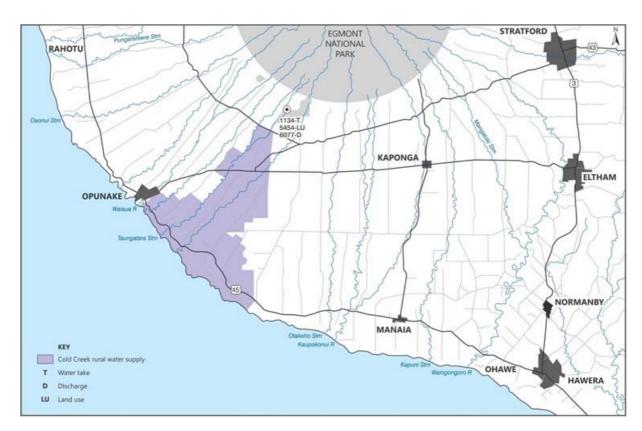


Figure 1 CCCWSL's water service area



Photo 1 CCCWSL's weir and intake screen

1.3 Resource consents

CCCWSL holds three resource consents the details of which are summarised in Table 1 below. Summaries of the conditions attached to each permit are set out in Section 3 of this report.

A summary of the various consent types issued by the Council is included in Appendix I, as are copies of all permits held by the Company during the period under review.

Table 1 Resource consents held by CCCWSL

Consent number	Purpose	Granted	Review	Expires	
	Water abstraction permit				
1134-3.2	To take water from Cold Creek to supply the Cold Creek Water Supply Scheme	Dec 2015	June 2024	June 2030	
	Water discharge permit				
6077-2.0	To discharge filter backwash water and stormwater from the Cold Creek water treatment plant into the Cold Creek	June 2018	June 2025	June 2030	
Land use permit					
5454-2.0	To dam water with a weir and water intake structure in the Cold Creek for water abstraction purposes	June 2018	June 2025	June 2030	

1.4 Monitoring programme

1.4.1 Introduction

Section 35 of the RMA sets obligations upon the Council to gather information, monitor and conduct research on the exercise of resource consents within the Taranaki region. The Council is also required to assess the effects arising from the exercising of these consents and report upon them.

The Council may therefore make and record measurements of physical and chemical parameters, take samples for analysis, carry out surveys and inspections, conduct investigations and seek information from consent holders.

The monitoring programme for the CCCWSL site consisted of six primary components.

1.4.2 Programme liaison and management

There is generally a significant investment of time and resources by the Council in:

- ongoing liaison with resource consent holders over consent conditions and their interpretation and application;
- · discussion over monitoring requirements;
- preparation for any consent reviews, renewals or new consent applications;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.4.3 Site inspections

The CCCWSL site was visited one time during the monitoring period. With regard to consents for the abstraction of and discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including contaminated stormwater and process wastewaters. Sources of data being collected by CCCWSL were identified and accessed, so that performance in respect of operation, internal monitoring, and supervision could be reviewed by the Council. The neighbourhood was surveyed for environmental effects.

1.4.4 Chemical sampling

The Council undertook sampling of both of the discharge ponds from the site. The CCCWSL discharge was sampled on one occasion, and the sample analysed for turbidity, pH and total suspended solids. Self-monitoring discharge results were supplied by CCCWSL and reviewed by Council staff.

1.4.5 Data review

The water abstraction consent contains a condition which requires CCCWSL to keep records of abstraction volumes, to determine the flow immediately below the abstraction point and record the reservoir levels and make these records available to the Council upon request. This data is telemetered to Council databases. All data is reviewed to assess compliance in regard to abstraction volumes of water taken and residual flow compliance.

1.4.6 Hydrological monitoring

Hydrological inspections of the site were undertaken to check CCCWSL's stage recording equipment. During these inspections, gauging's were undertaken to measure the flow in Cold Stream to enable the maintenance of a rating curve and to ensure compliance with the residual flow consent condition.

1.4.7 Biomonitoring and fish surveys

Two three-site macroinvertebrate surveys were undertaken to assess the impact of the water abstraction and discharges in the reticulated supply area.

Electric fishing surveys are completed triennially, with the next one due to be undertaken in the 2024-2025 monitoring period.

2 Results

2.1 Water

2.1.1 Inspections

The site was visited on 3 February 2023. The abstraction rate was not able to be obtained as the Council officers did not have access to the building, however based on the telemetered data received by Council, the abstraction rate at the time of the inspection was 219 m³/h. A sample was collected from each pond that was discharging back into the Cold Stream. The weir was checked and no issues were noted. The intake was screened and the fish pass appeared to be working effectively. No erosion or scour was noted on the stream bed around the structure, however it was noted that there was a slight undercut at the end of the fish pass with a small waterfall.

2.1.2 Results of discharge monitoring

Two discharge samples were collected during the monitoring period, as shown in Table 2.

Table 2 Results of CCCWSL filter backwash discharge on 3 February 2023

Parameter	Free Chlorine	рН	Suspended solids	Turbidity
Units	g/m³	g/m³	g/m³	FNU
STW002006	N/A	7.3	<3	2.5
STW002067	N/A	7.8	<3	1.76
Consent limit	0.1	6-9	20	-

N/A: Not tested

The discharge was found to be compliant with consent limits and no visual effects were noted in the receiving environment.

CCCWSL undertook self-monitoring of their backwash discharge into the Cold Stream. The results, given in Table 3, show that CCCWSL were generally compliant throughout the monitoring year for suspended solids, pH and free available chlorine, except for the sample collected on 5 Jan 2023, where elevated levels of suspended sediments were recorded. This sample was of the backwash prior to the entry to the discharge ponds, so had elevated levels of surface run-off in the sample as well and was therefore not representative of what was being discharged to the stream.

Table 3 CCCWSL backwash self-monitoring discharge sampling

Dete	Free Chlorine	рН	Suspended solids
Date	g/m³	g/m³	g/m³
19 Sep 2022	< 0.05	7.3	< 5
14 Oct 2022	< 0.05	7.4	< 5
6 Nov 2022	< 0.05	7.3	11
15 Dec 2022	< 0.07	7.1	14
5 Jan 2023	0.08	7.1	64
13 Feb 2023	< 0.05	6.4	< 5
23 Mar 2023	< 0.07	6.9	6
24 Apr 2023	< 0.07	7.1	< 5

Dete	Free Chlorine	рН	Suspended solids
Date	g/m³	g/m³	g/m³
30 May 2023	< 0.07	8.2	7
09 Jun 2023	< 0.07	7.2	< 5
Consent limit	0.1	6-9	20

2.1.3 Abstraction Monitoring

CCCWSL recorded their water abstraction which was telemetered to the Council and reviewed for compliance. During the period under review CCCWSL complied with their normal operational abstraction limit of 69 L/s for 96% of the time. There were six occasions when CCCWSL were required to use their exceptional use limit of 79 L/s due to the reservoir levels falling below 80%. In all of these instances CCCWSL advised Council and affected parties of this requirement, as per their consent conditions. However, one of these instances CCCWSL went over and above their 79 L/s for 24 hours (with permission from Council) to ensure they continued to provide water to their community while they were fixing a mains pipe burst. An abatement notice was issued for this event and is discussed in Section 2.2. Figure 2 shows CCCWSL's abstraction for the 2022-2023 monitoring period.

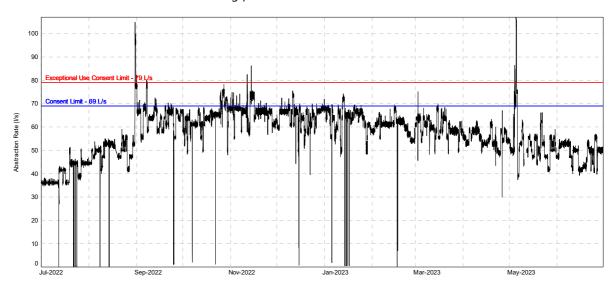


Figure 2 CCCWSL abstraction rates for 2022-2023

2.1.4 Hydrological inspections and residual flow assessment

CCCWSL provides telemetered river level data via a pressure transducer, which is related back to a fixed staff gauge in the stream. CCCWSL are required to assess the residual flow immediately downstream of the abstraction site, which is determined by developing a rating curve from flow gauging's. Three flow gauging's are programmed to be completed each monitoring year to ensure that the rating is correct. The flow gauging's completed for the 2022-2023 monitoring year are shown in Table 4.

Table 4 Flow gauging's undertaken for the CCCWSL

Date	Flow (L/s)	Compliant (Y/N)
10-Nov-2022	262	Υ
25-Jan-2023	268	Υ
11-Apr-2023	314	Υ

Special condition 9 of 1134-3.2 requires CCCWSL to introduce conservation measures when the flow in the Cold Stream immediately downstream of the intake point is less than 209 L/s. This requires that the taking of water be restricted to the minimum amount necessary to maintain the health and welfare of people and animals (i.e. garden watering and other non-essential uses are prohibited). Due to the wet summer season experienced in 2022-2023, the residual flow did not fall below the 209 L/s conservation trigger (Figure 3).

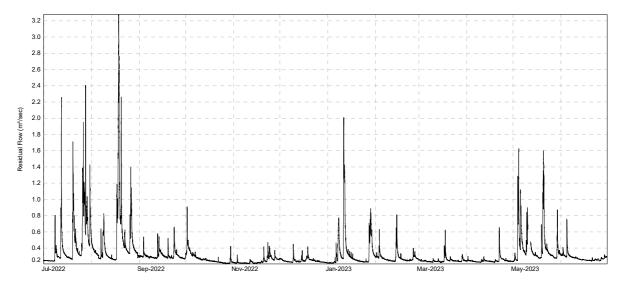


Figure 3 CCCWSL residual flow compliance for 2022-2023

2.1.5 Biomonitoring surveys

Council undertook two, three-site, macroinvertebrate surveys to assess the potential effects on in-stream aquatic communities as result of CCCWSL's abstractions, structures and discharges.

The Council's standard 'kick-sampling' technique was used at three established sites to collect streambed macroinvertebrates from the Cold Stream in relation to the Cold Creek water supply scheme. Samples were processed to provide number of taxa (richness), MCI and SQMCI_S scores for each site.

The MCI is a measure of the overall sensitivity of the macroinvertebrate community to the effects of organic pollution in stony streams. It is based on the presence/absence of taxa with varying degrees of sensitivity to environmental conditions. The SQMCI_S takes into account taxa abundance as well as sensitivity to pollution, and may reveal more subtle changes in communities. It may be the more appropriate index if non-organic impacts are occurring.

Significant differences in either the MCI or the SQMCI_S between sites indicate the degree of adverse effects (if any) of the discharges being monitored. The abstraction of surface water, particularly for extended periods of time, may result in significant adverse effects on the macroinvertebrate communities living within a waterbody by potentially reducing flow velocities, wetted habitat area, and dissolved oxygen levels and increasing stream temperature, periphyton abundance, macrophytes, pH, and deposited sediment.

25 October 2022

Taxa richness was moderate at the three sites surveyed in the Cold Stream (Figure 4). All sites recorded a taxa richness either equal or slightly higher than that previously recorded, however taxa richness at all the sites was lower than their respective site medians. The composition of the communities at the Cold Stream sites reflected the cool, stony nature of the stream located in the upper mid-reaches of the catchment.

MCI values recorded in the Cold Stream were reflective of 'very good' macroinvertebrate health. Sites C1 and C3 both recorded their highest MCI scores on record to date. Their results were higher than the previous survey and were significantly higher than their medians. Site C2 recorded significantly lower than

site C1 (by 11 units). This is likely due to site C2 having more 'tolerant' taxa present, leading to a decrease in MCI. The decline in MCI scores between sites C1 and C2 could be indicative of a deterioration in macroinvertebrate community health, which may be associated with the reduction in stream flow. However, due to MCI increasing by 10 units again at between sites C2 and C3, this is likely a localised event, with sites C1 and C3 scoring similar to each other.

The SQMCI scores recorded at all sites were indicative of 'excellent' macroinvertebrate community health. All three scores were within the ranges of those recorded previously. There were no significant differences in SQMCI scores between sites in the current survey. All sites recorded SQMCI scores slightly higher than their respective site medians. These higher SQMCI scores are likely driven by the 'highly sensitive' *Deleatidium* mayfly, which was 'very abundant' at all three sites.

Overall, there was no strong evidence that water abstraction from the Cold Stream or discharge to the Cold Stream had significantly affected the freshwater macroinvertebrate communities of this stream.

6 March 2023

Taxa richness was moderate at the three sites surveyed in the Cold Stream (Figure 5). There was a slight decrease in taxa richness in a downstream direction, with 18 taxa recorded at site C1 and 16 recorded at site C3. The composition of the communities at the Cold Stream sites reflected the cool, stony nature of the stream located in the upper mid-reaches of the catchment.

MCI values recorded in the Cold Stream were reflective of 'very good' macroinvertebrate health. MCI scores showed a slight increase in a downstream direction, however there were no significant differences recorded between sites. All sites recorded MCI scores either equal to or less than that recorded in the previous survey, with site C1 recording significantly lower (by 12 units). Sites C1 and C2 recorded slightly lower than their site medians, while site C3 recorded slightly higher.

The SQMCI scores were reflective of 'excellent' macroinvertebrate community health at site C1, 'very good' health at site C2, and 'good' health at site C3. Site C1 recorded similar values to both that previously recorded and the site median, while both sites C2 and C3 recorded significantly lower than both that previously recorded and their site medians. SQMCI scores indicated a decrease in health in a downstream direction, with sites C2 and C3 recording significantly lower than site C1 (by 1.1 units and 1.5 units respectively). Sites C2 and C3 were not significantly different to one another, although site C3 was slightly lower. Given that there were no significant differences between the two downstream sites, and that the scores were still within the range of that recorded throughout the entire monitoring period, there was overall no strong evidence that the discharge to the Cold Stream had significantly affected the freshwater macroinvertebrate communities at site C3.

Overall, there was no strong evidence that water abstraction from the Cold Stream or discharge to the Cold Stream had significantly affected the freshwater macroinvertebrate communities of this stream.

Copies of biomonitoring reports for this site are available from the Council upon request.

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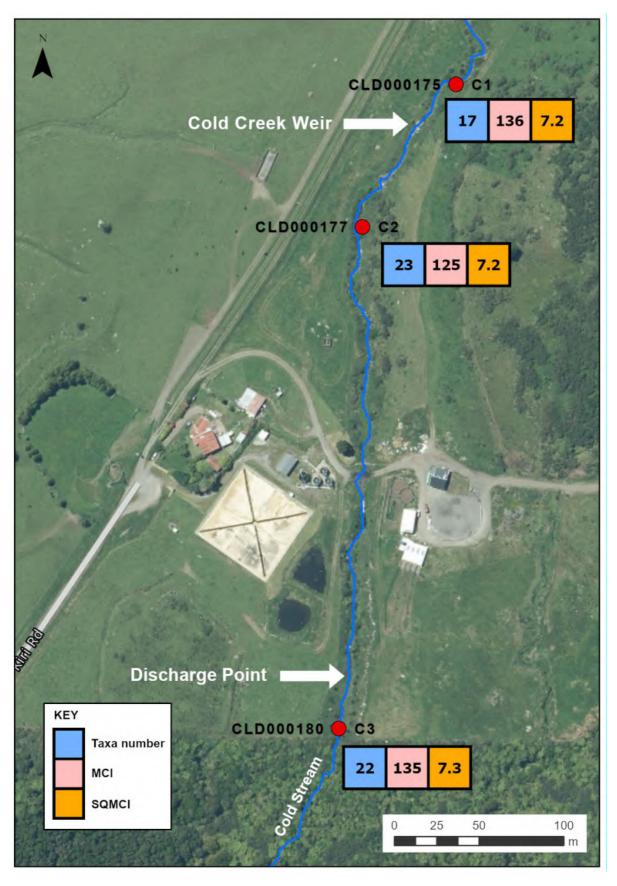


Figure 4 Location of biomonitoring sites in the Cold Stream in relation to the Cold Creek water supply scheme with taxa number, MCI scores and SQMCI scores for each site, October 2022

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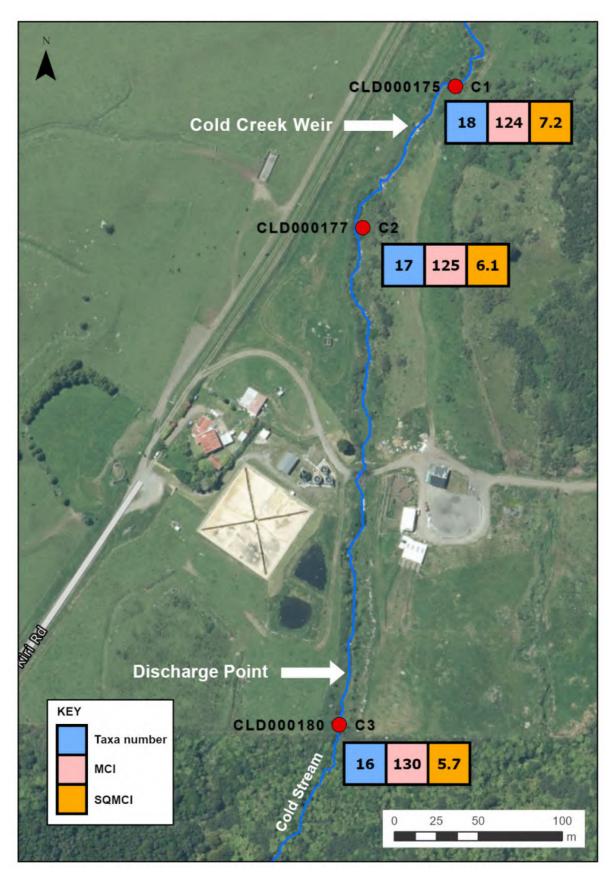


Figure 5 Location of biomonitoring sites in the Cold Stream in relation to the Cold Creek water supply scheme with taxa number, MCI scores and SQMCI scores for each site, March 2023

2.2 Leak detection and water conservation

Special condition 12 of consent 1134-3.2 states;

The consent holder shall, on an annual basis, provide a report detailing:

- the work done to detect and minimise leaks;
- water use efficiency and conservation measures undertaken; and
- water use benchmarking data for the region and how the area supplied by this consent supplied compare.

CCCWSL's priorities in operations are:

- · to minimise leaks;
- promote water conservation;
- promoting excellent water management on farms (in particular);
- while also running an efficient head works and reticulation system.

Leak detections are discovered through remotely monitored meters which can sometimes be problematic to find. Extensive resources are used to find and address any problems that arise in a timely manner.

One of CCCWSL's core tasks is each month, every part of the reticulation network is visited to identify any faults or problems existing that may become an issue. Adjustments to pressure reducing valves (PRV's) are carried out where necessary. This is all documented and prioritised, and timelines developed for any futures work required. They also deal with water loss events promptly and regardless of weather conditions and time of day.

CCCWSL are continuing to develop their remote monitoring project, which will allow consumers to self-monitor their water usage. Over the 2022-2023 Christmas break they completed placing the controllers needed to allow data to be transferred from meters to gateways. Also major software developments have been completed, with the next step being the alerts and accounting system, which is still to be finalised. Developments currently underway are providing access to consumers through a dashboard and developing a faults recognition system.

CCCWSL replaced over two kilometres of higher risk PVC pipe, which was 35 years old, with the thicker walled HDPE (high density polyethylene) pipe. HDPE pipe is a flexible plastic pipe that is used for transporting water at high pressures. They also moved a mains PRV, air valves and associated works. They also completed major developments at the headwork's, which provides them access to deeply buried shutoff and bypass valves.

CCWSL have also continued to provide significant subsidies to consumers to allow the purchasing of on-site water storage tanks to enhance the community's contingency response to any water shortage difficulties.

Over the monitoring year there were two occasions where CCCWSL exceeded their secondary abstraction rate consent limit of 79 L/s, as they had major failures of their mains pipes. To ensure that their customers still had water for stock and health needs the Council agreed to allow CCCWSL to go above this limit. River flows at the time of these failures were high, so there was no risk of residual flow limits being reached. However, due to the size of the abstraction required and the length of time that the abstraction occurred above the 79 L/s, the Council issued an abatement notice for the event that occurred from 30 August to 1 September 2022.

2.3 Incidents, investigations, and interventions

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with CCCWSL. During the year matters may arise which require

additional activity by the Council, for example provision of advice and information, or investigation of potential or actual causes of non-compliance or failure to maintain good practices. A pro-active approach, that in the first instance avoids issues occurring, is favoured.

For all significant compliance issues, as well as complaints from the public, the Council maintains a database record. The record includes events where the individual/organisation concerned has itself notified the Council. Details of any investigation and corrective action taken are recorded for non-compliant events.

Complaints may be alleged to be associated with a particular site. If there is potentially an issue of legal liability, the Council must be able to prove by investigation that the identified individual/organisation is indeed the source of the incident (or that the allegation cannot be proven).

Table 5 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to CCCWSL's activities during the 2022-2023 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 5 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
01/09/22	Water abstraction rate consent limits breached	N	Abatement notice	An explanation was received, and was accepted by Council. CCCWSL were required to comply with their consent conditions at all times.

3 Discussion

3.1 Discussion of site performance

No issues were noted with CCCWSL's weir, intake or fish pass and the discharge ponds appeared to be functioning well.

Abstraction data was telemetered to Council and discharge sampling data was received. There was one incident lodged due to CCCWSL requiring water above their consented rate due to mains pipe bursts.

During the 2022-2023 monitoring period CCCWSL undertook several measures to minimise leaks and promote water conservation. This included the replacement 2 kilometres of pipework, moving a major PRV and completing major works at the headwork's. They are continuing to develop their remote monitoring network, by developing dashboards for their consumers to see their water use and developing a faults recognition system. CCCWSL continue to subsidise the purchase of 30,000 L tanks for on farm storage to provide contingencies in an event of a water shortage.

3.2 Environmental effects of exercise of consents

No effects as a result of the abstraction or discharges were noted during the annual inspection. However, it was noted that a slight waterfall had formed at the end of the fish pass. The consent holder has been advised and remediation is occurring in the 2023-2024 monitoring period.

The results of the biomonitoring surveys found no evidence of effects as a result of discharges, structures or water abstraction.

3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Tables 6-9.

Table 6 Summary of performance for consent 1134-3.2

Pu	Purpose: To take water from Cold Creek to supply the Cold Creek Water Supply Scheme					
	Condition requirement	Means of monitoring during period under review	Compliance achieved?			
1.	Rate of abstraction during normal operations shall not exceed 69 L/s	Review of abstraction data	100%			
2.	Criteria and requirements for taking above 69 L/s	Exercised	Notification received. One abatement notice issued			
3.	Measure and record abstraction, stream flow, and reservoir level	Data received	Yes			
4.	Provision of abstraction records in suitable format	Records received	Yes			
5.	Measurements transmitted in 'real time' to Council	Data received	Yes			
6.	Equipment installed and maintained as per water takes regulations	Meter verified	Yes – Aug 2018			

Purpose: To take water from Cold Creek to supply the Cold Creek Water Supply Scheme				
Condition requirement		Means of monitoring during period under review	Compliance achieved?	
7.	Notification to Council of equipment failure	Liaison with consent holder	Yes	
8.	Measuring and recording equipment to be accessible	Inspection	Yes	
9.	Restrictions on abstraction when flow below 209 L/s	Liaison with consent holder	Yes	
10.	Intake screened	Inspection	Yes	
11.	Best practicable option to minimise environmental effects	Inspections and liaison with consent holder	Yes	
12.	2. Report annually on efficient water use, leak detection and repair Report received		Yes	
13.	Review provision	Next option for review – June 2024	N/a	
	erall assessment of consent complia consent	Improvement required		
Ove	erall assessment of administrative	High		

N/A = not applicable

Table 7 Summary of performance for consent 5454-2.0

Taungatara Catchment for water abstraction purposes					
Condition requirement		Means of monitoring during period under review	Compliance achieved?		
1.	Maintain the weir so that it remains fit for purpose	Yes			
<u>2</u> .	Minimise riverbed disturbance and reinstate areas disturbed	Inspection	Yes		
3.	No obstruction of fish passage	Partial			
1.	Review provision	N/a			
	erall assessment of consent complia consent	Good			
Overall assessment of administrative performance in respect of this consent High					

N/A = not applicable

Table 8 Summary of performance for consent 6077-2.0

Pui	Purpose: To discharge filter backwash water and supernatant from the Cold Creek WTP into the Cold Creek				
Condition requirement		Means of monitoring during period under review	Compliance achieved?		
1.	Best practicable option to minimise adverse effects	Inspection	Yes		
2.	Limit on discharge rate	Inspection – 60 m3/day	Yes		

Purpose: To discharge filter backwash water and supernatant from the Cold Creek WTP into the Cold Creek				
Condition requirement		Means of monitoring during period under review	Compliance achieved?	
3.	Discharge not to cause certain effects in the receiving waters	Inspection and biomonitoring	Yes	
4.	Limits on chlorine, suspended solids and pH in discharge	Sampling and self-monitoring	Yes	
5.	Monthly discharge sampling with limits on chlorine, suspended solids and pH	Monthly sampling data received	Yes	
6.	Notify council of any changes to processes or operations	No changes made	N/a	
7.	Review provision	Next option for review - June 2025	N/a	
	erall assessment of consent complia s consent	High		
Ov	erall assessment of administrative	High		

N/A = not applicable

Table 9 Evaluation of environmental performance over time

Year	Consent no	High	Good	Improvement req	Poor
	1134	1	-	-	-
2010	5454	1	-	-	-
	6077	1	-	-	-
	1134	-	-	1	-
2011	5454	1	-	-	-
	6077	1	-	-	-
	1134	-	1	-	-
2012	5454	1	-	-	-
	6077	1	-	-	-
	1134	1	-	-	-
2013	5454	1	-	-	-
	6077	1	-	-	-
	1134	1	-	-	-
2014	5454	1	-	-	-
	6077	1	-	-	-
	1134	-	1	-	-
2015	5454	1	-	-	-
	6077	1	-	-	-
2016	1134	-	1	-	-
2016	5454	1	-	-	-

Year	Consent no	High	Good	Improvement req	Poor
	6077	1	-	-	-
	1134	1	-	-	-
2017	5454	1	-	-	-
	6077	1	-	-	-
	1134	-	1	-	-
2018	5454	1	-	-	-
	6077	1	-	-	-
	1134	1	-	-	-
2019	5454	1	-	-	-
	6077	-	1	-	-
	1134	1	-	-	-
2020	5454	1	-	-	-
	6077	-	1	-	-
	1134	1	-	-	-
2021	5454	1	-	-	-
	6077	1	-	-	-
	1134	1	-	-	-
2022	5454	1	-	-	-
	6077	1	-	-	-
	1134	-	-	1	-
2023	5454		1	-	-
	6077	1	-	-	-
Totals		33	7	2	0

During the year, CCCWSL demonstrated a good level of environmental and high level of administrative performance with the resource consents as defined in Appendix II.

3.4 Recommendations from the 2021-2022 Annual Report

In the 2021-2022 Annual Report, it was recommended:

- 1. THAT in the first instance, monitoring of consented activities at CCCWSL in the 2022-2023 year continue at the same level as in 2021-2022.
- 2. THAT should there be issues with environmental or administrative performance in 2022-2023, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Recommendations one was implemented, while it was not considered necessary to carry out additional investigations or monitoring as per recommendation two.

3.5 Alterations to monitoring programmes for 2023-2024

In designing and implementing the monitoring programmes for air/water discharges in the region, the Council has taken into account:

- the extent of information already made available through monitoring or other means to date;
- its relevance under the RMA;
- the Council's obligations to monitor consented activities and their effects under the RMA;
- the record of administrative and environmental performances of the consent holder; and
- reporting to the regional community.

The Council also takes into account the scope of assessments required at the time of renewal of permits, and the need to maintain a sound understanding of industrial processes within Taranaki exercising resource consents.

There are no planned changes for the 2023-2024 monitoring programme.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site(s) in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2023-2024.

3.6 Exercise of optional review of consent

Resource consent 1134-3.2 provides for an optional review of the consent in June 2024. Condition 13 allows the Council to review the consent, if there are grounds that the conditions of the consent are inadequate to deal with any adverse effects on the environment arising from the exercise of the consent.

Based on the results of monitoring in the year under review, and in previous years as set out in earlier annual compliance monitoring reports, it is considered that there are no grounds that require a review to be pursued or grounds to exercise the review option.

4 Recommendations

- 1. THAT in the first instance, monitoring of consented activities at CCCWSL in the 2023-2024 year continue at the same level as in 2022-2023.
- 2. THAT should there be issues with environmental or administrative performance in 2023-2024, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
- 3. THAT the option for a review of resource consent in June 2024, as set out in condition 13 of the consent, not be exercised, on the grounds that the current consent conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this consent.

Glossary of common terms and abbreviations

The following abbreviations and terms may be used within this report:

Biomonitoring Assessing the health of the environment using aquatic organisms.

Conductivity Conductivity, an indication of the level of dissolved salts in a sample, usually

measured at 25°C and expressed in µS/cm.

Cumec A volumetric measure of flow- 1 cubic metre per second (1 m³s-¹).

DO Dissolved oxygen.

Fresh Elevated flow in a stream, such as after heavy rainfall.

g/m³ Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is

also equivalent to parts per million (ppm), but the same does not apply to gaseous

mixtures.

Incident An event that is alleged or is found to have occurred that may have actual or

potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does

not automatically mean such an outcome had actually occurred.

Intervention Action/s taken by Council to instruct or direct actions be taken to avoid or reduce

the likelihood of an incident occurring.

Investigation Action taken by Council to establish what were the circumstances/events

surrounding an incident including any allegations of an incident.

Incident register The incident register contains a list of events recorded by the Council on the basis

that they may have the potential or actual environmental consequences that may

represent a breach of a consent or provision in a Regional Plan.

L/s Litres per second. m^2 Square Metres.

MCI Macroinvertebrate community index; a numerical indication of the state of biological

life in a stream that takes into account the sensitivity of the taxa present to organic

pollution in stony habitats.

Mixing zone The zone below a discharge point where the discharge is not fully mixed with the

receiving environment. For a stream, conventionally taken as a length equivalent to

7 times the width of the stream at the discharge point.

μS/cm Microsiemens per centimetre.

NTU Nephelometric Turbidity Unit, a measure of the turbidity of water.

pH A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers

lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For

example, a pH of 4 is ten times more acidic than a pH of 5.

Physicochemical Measurement of both physical properties (e.g. temperature, clarity, density) and

chemical determinants (e.g. metals and nutrients) to characterise the state of an

environment.

Resource consent Refer Section 87 of the RMA. Resource consents include land use consents (refer

Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water

permits (Section 14) and discharge permits (Section 15).

RMA Resource Management Act 1991 and including all subsequent amendments.

SS Suspended solids.

SQMCI Semi quantitative macroinvertebrate community index.

Temp Temperature, measured in °C (degrees Celsius).

Turb Turbidity, expressed in NTU or FNU.

For further information on analytical methods, contact the Environmental Assurance Manager.

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Appendix I

Resource consents held by CCCWSL

(For a copy of the signed resource consent please contact the TRC Consents department)

Water abstraction permits

Section 14 of the RMA stipulates that no person may take, use, dam or divert any water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or it falls within some particular categories set out in Section 14. Permits authorising the abstraction of water are issued by the Council under Section 87(d) of the RMA.

Water discharge permits

Section 15(1)(a) of the RMA stipulates that no person may discharge any contaminant into water, unless the activity is expressly allowed for by a resource consent or a rule in a regional plan, or by national regulations. Permits authorising discharges to water are issued by the Council under Section 87(e) of the RMA.

Air discharge permits

Section 15(1)(c) of the RMA stipulates that no person may discharge any contaminant from any industrial or trade premises into air, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Permits authorising discharges to air are issued by the Council under Section 87(e) of the RMA.

Discharges of wastes to land

Sections 15(1)(b) and (d) of the RMA stipulate that no person may discharge any contaminant onto land if it may then enter water, or from any industrial or trade premises onto land under any circumstances, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Permits authorising the discharge of wastes to land are issued by the Council under Section 87(e) of the RMA.

Land use permits

Section 13(1)(a) of the RMA stipulates that no person may in relation to the bed of any lake or river use, erect, reconstruct, place, alter, extend, remove, or demolish any structure or part of any structure in, on, under, or over the bed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Land use permits are issued by the Council under Section 87(a) of the RMA.

Coastal permits

Section 12(1)(b) of the RMA stipulates that no person may erect, reconstruct, place, alter, extend, remove, or demolish any structure that is fixed in, on, under, or over any foreshore or seabed, unless the activity is expressly allowed for by a resource consent, a rule in a regional plan, or by national regulations. Coastal permits are issued by the Council under Section 87(c) of the RMA.

Water Permit Pursuant to the Resource Management Act 1991 a resource consent is hereby granted by the Taranaki Regional Council

Name of Cold Creek Community Water Supply Limited

Consent Holder: 2 Havelock Street

Opunake 4616

Decision Date

(Change):

3 December 2015

Commencement Date

(Change):

14 January 2016 (Granted Date: 10 July 2013)

Conditions of Consent

Consent Granted: To take water from Cold Stream to supply the Cold Creek

Water Supply Scheme

Expiry Date: 1 June 2030

Review Date(s): June 2018, June 2021, June 2024, June 2027

Site Location: 620 Kiri Road, Opunake

Legal Description: Pt Secs 4 & 5 Blk V Kaupokonui SD (Site of take)

Grid Reference (NZTM) 1686870E-5639970N

Catchment: Taungatara

Tributary: Cold Stream

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document

Page 1 of 4

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

- 1. Subject to condition 2 below the rate of taking shall not exceed 69 litres per second.
- 2. The rate of taking may be higher than 69 litres per second over specific 14 day periods provided that:
 - (a) due to unusually high demand resulting from extreme weather conditions, the consent holder can not maintain the reservoir above 80% full while taking at a rate of 69 litres per second;
 - (b) the rate of taking is the minimum necessary maintain the reservoir above 80% full;
 - (c) the rate of taking does not exceed 79 litres per second;
 - (d) before taking water under this condition the consent holder advises the Chief Executive, Taranaki Regional Council, Te Korowai o Ngāruahine Trust and Fish and Game New Zealand of the date that the specific 14 day period will commence; and
 - (e) the advice given in accordance with (d) above includes specific information about water demand and weather conditions supporting the need for the additional water.

The advice required by this condition shall be given by email to worknotification@trc.govt.nz and to an email address as advised to the consent holder by each of Te Korowai o Ngāruahine Trust and Fish and Game New Zealand.

3. The consent holder shall:

- (a) measure and record, using a tamper-proof device, the volume of water taken at intervals not exceeding 15 minutes to an accuracy of \pm 5%; and
- (b) determine the flow in Cold Stream immediately downstream of the intake at intervals not exceeding 15 minutes to an accuracy of \pm 10%;
- (c) measure and record the reservoir level in a form that enables the Chief Executive, Taranaki Regional Council to determine compliance with conditions 2(a) and 2(b) above

Note: Water meters and dataloggers must be installed, and regularly maintained, in accordance with manufacturer's specifications in order to ensure that they meet the required accuracy. Even with proper maintenance water meters and dataloggers have a limited lifespan.

4. The records of water taken shall:

- (a) be in a format that, in the opinion of the Chief Executive, Taranaki Regional Council, is suitable for auditing; and
- (b) specifically record the water taken as 'zero' when no water is taken.

- 5. The measurements made in accordance with condition 3, in a format to be advised by the Chief Executive, Taranaki Regional Council, shall be transmitted to the Taranaki Regional Council's computer system to maintain a 'real time' record of the water taken and the flow immediately downstream of the intake.
- 6. The consent holder shall provide the Chief Executive, Taranaki Regional Council with a document from a suitably qualified person certifying that water measuring and recording equipment required by the conditions of this consent ('the equipment'):
 - (a) has been installed in accordance with the manufacturer's specifications and/or current industry standards;
 - (b) is being operated and maintained in accordance with the manufacturer's specifications and/or current industry standards; and/or
 - (c) has been tested and shown to be operating to an accuracy of \pm 5%.

The documentation shall be provided:

- (i) within 30 days of the installation of a water meter or datalogger;
- (ii) at other times when reasonable notice is given and the Chief Executive, Taranaki Regional Council has reasonable evidence that the equipment may not be functioning as required by this consent; and
- (iii) no less frequently than once every five years.
- 7. If any measuring or recording equipment breaks down, or for any reason is not operational, the consent holder shall advise the Chief Executive, Taranaki Regional Council immediately. Any repairs or maintenance to this equipment must be undertaken by a suitably qualified person.
- 8. All measuring and recording equipment required by the conditions of this consent ('the equipment') shall be accessible to Taranaki Regional Council officers at all reasonable times for inspection and/or data retrieval. In addition, the equipment shall be designed and installed so that Taranaki Regional Council officers can readily verify that it is accurately recording the required information.
- 9. When the flow in Cold Stream immediately downstream of the intake point is less than 209 litres/second, the taking of water shall be restricted to the minimum amount necessary to maintain the health and welfare of people and animals (i.e. garden water and other non-essential uses are prohibited).
- 10. The consent holder shall ensure that the intake is screened to avoid fish entering the intake or being trapped against the screen.
- 11. At all times the consent holder shall adopt the best practicable option to prevent or minimise any actual or likely adverse effect on the environment associated with the abstraction of water, including, but not limited to, the efficient and conservative use of water.

Consent 1134-3.2

- 12. The consent holder shall, on an annual basis, provide a report detailing:
 - the work done to detect and minimise leaks;
 - water use efficiency and conservation measures undertaken; and
 - water use benchmarking data for the region and how the area supplied by this consent supplied compare.

The report(s) shall be provided to the Chief Executive, Taranaki Regional Council before 31 August each year and cover the previous 1 July to 30 June period.

13. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the months of June 2018 and/or June 2021 and/or June 2024 and/or June 2027, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 3 December 2015

For and on behalf of Taranaki Regional Council

A D McLay

Director - Resource Management

Land Use Consent Pursuant to the Resource Management Act 1991 a resource consent is hereby granted by the Taranaki Regional Council

Name of Cold Creek Community Water Supply Limited

Consent Holder: 2 Havelock Street

Opunake 4616

Decision Date: 7 June 2018

Commencement Date: 7 June 2018

Conditions of Consent

Consent Granted: To dam water with a weir and water intake structure in the

Cold Stream for water abstraction purposes

Expiry Date: 1 June 2030

Review Date(s): June 2019 and at 3-yearly intervals thereafter

Site Location: 620 Kiri Road, Te Kiri

Grid Reference (NZTM) 1686868E-5639969N

Catchment: Taungatara

Tributary Cold Stream

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

- 1. The consent holder shall maintain the weir so that it remains sound and fit for purpose.
- 2. The consent holder shall repair any erosion or scour of the river bed or banks caused by the weir and take reasonable steps to stop it recurring.
- 3. The weir shall not obstruct fish passage.
- 4. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2019 and at 3-yearly intervals thereafter, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

For and on behalf of

Signed at Stratford on 7 June 2018

Taranaki Regional Council
A D McLay
Director - Resource Management

Discharge Permit Pursuant to the Resource Management Act 1991 a resource consent is hereby granted by the Taranaki Regional Council

Name of Cold Creek Community Water Supply Limited

Consent Holder: 2 Havelock Street

Opunake 4616

Decision Date: 7 June 2018

Commencement Date: 7 June 2018

Conditions of Consent

Consent Granted: To discharge filter backwash water and stormwater from the

Cold Creek water treatment plant into the Cold Stream

Expiry Date: 1 June 2030

Review Date(s): June 2019 and at 3-yearly intervals thereafter

Site Location: 620 Kiri Road, Te Kiri

Grid Reference (NZTM) 1686820E-5639648N

Catchment: Taungatara

Tributary: Cold Stream

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document

General condition

a. The consent holder shall pay to the Taranaki Regional Council all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act 1991.

Special conditions

- 1. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to prevent or minimise any actual or likely adverse effect on the environment associated with the discharge of contaminants from the site.
- 2. The discharge rate shall not exceed 60 cubic metres per day.
- 3. That after allowing for reasonable mixing, within a mixing zone extending 25 metres below the discharge point, the discharge shall not give rise to any of the following effects in the Cold Stream:
 - (a) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - (b) any conspicuous change in the colour or visual clarity;
 - (c) any emission of objectionable odour;
 - (d) the rendering of fresh water unsuitable for consumption by farm animals;
 - (e) any significant adverse effects on aquatic life, habitats, or ecology.
- 4. Constituents of the discharge shall meet the standards shown in the following table.

<u>Constituent</u>	<u>Standard</u>
pH	Within the range 6.0 to 9.0
suspended solids	Concentration not greater than 20 gm ⁻³
Free available chlorine	Concentration not greater than 0.1 gm ⁻³

- 5. The consent holder shall sample the discharge at least once per month. The sample shall be analysed for:
 - Suspended solids;
 - Free available chlorine; and
 - pH.

The results of the sampling shall be provided to the Chief Executive Taranaki Regional Council upon request.

6. The consent holder shall notify the Chief Executive, Taranaki Regional Council, prior to making any changes to the processes or operations undertaken at the site. Any such change shall then only occur following receipt of any necessary approval under the Resource Management Act, 1991. Notification shall include the consent number, a brief description of the activity consented and an assessment of the environmental effects of any changes, and be emailed to consents@trc.govt.nz.

Consent 6077-2.0

7. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2019 and at 3-yearly intervals thereafter, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 7 June 2018

For and on behalf of Taranaki Regional Council

A D McLay Director - Resource Management

Appendix II

Categories used to evaluate environmental and administrative performance

Categories used to evaluate environmental and administrative performance

Environmental performance is concerned with <u>actual or likely effects</u> on the receiving environment from the activities during the monitoring year. Administrative performance is concerned with the Company's approach to demonstrating consent compliance <u>in site operations and management</u> including the timely provision of information to Council (such as contingency plans and water take data) in accordance with consent conditions.

Events that were beyond the control of the consent holder <u>and</u> unforeseeable (that is a defence under the provisions of the RMA can be established) may be excluded with regard to the performance rating applied. For example loss of data due to a flood destroying deployed field equipment.

The categories used by the Council for this monitoring period, and their interpretation, are as follows:

Environmental Performance

High: No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving environmental impacts and was not obliged to issue any abatement notices or infringement notices in relation to such impacts.

Good: Likely or actual adverse effects of activities on the receiving environment were negligible or minor at most. There were some such issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party but these items were not critical, and follow-up inspections showed they have been dealt with. These minor issues were resolved positively, co-operatively, and quickly. The Council was not obliged to issue any abatement notices or infringement notices in relation to the minor non-compliant effects; however abatement notices may have been issued to mitigate an identified potential for an environmental effect to occur.

For example:

- High suspended solid values recorded in discharge samples, however the discharge was to land or to receiving waters that were in high flow at the time;
- Strong odour beyond boundary but no residential properties or other recipient nearby.

Improvement required: Likely or actual adverse effects of activities on the receiving environment were more than minor, but not substantial. There were some issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent minor non-compliant activity could elevate a minor issue to this level.

Abatement notices and infringement notices may have been issued in respect of effects.

Poor: Likely or actual adverse effects of activities on the receiving environment were significant. There were some items noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent moderate non-compliant activity could elevate an 'improvement required' issue to this level. Typically there were grounds for either a prosecution or an infringement notice in respect of effects.

Administrative performance

High: The administrative requirements of the resource consents were met, or any failure to do this had trivial consequences and were addressed promptly and co-operatively.

Good: Perhaps some administrative requirements of the resource consents were not met at a particular time, however this was addressed without repeated interventions from the Council staff. Alternatively

adequate reason was provided for matters such as the no or late provision of information, interpretation of 'best practical option' for avoiding potential effects, etc.

Improvement required: Repeated interventions to meet the administrative requirements of the resource consents were made by Council staff. These matters took some time to resolve, or remained unresolved at the end of the period under review. The Council may have issued an abatement notice to attain compliance.

Poor: Material failings to meet the administrative requirements of the resource consents. Significant intervention by the Council was required. Typically there were grounds for an infringement notice.