

New Plymouth District Council
Water Supplies
Monitoring Programme
Annual Report
2021-2022

Technical Report 2022-33



Working with people | caring for Taranaki



Taranaki Regional Council
Private Bag 713
Stratford

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Executive summary

New Plymouth District Council (NPDC) operates five water supply schemes in the New Plymouth District. This report for the period July 2021 to June 2022 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess NPDC'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 NPDC's activities.

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

NPDC holds 20 resource consents relating to those water supply systems, which included a total of 159 conditions setting out the requirements that the consent holder must satisfy. This included seven consents to take and use water, three consents to discharge to water, nine consents to maintain structures, and one consent to discharge filter backwash onto and into land.

The Council's monitoring programme for the year under review included an annual inspection of each water supply scheme, two hydrological gauging's, four samples collected for water quality analysis, one fish survey, and an assessment of the abstraction and discharge data provided by NPDC.

The monitoring showed that overall the NPDC water schemes are well operated and maintained and appeared to be having no adverse effects on the environment. There were no unauthorised incident/s recording non-compliance in respect of NPDC's water supply schemes during the period under review.

For reference, in the 2021-2022 year, consent holders were found to achieve a high level of environmental performance and compliance for 88% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 10% of the consents, a good level of environmental performance and compliance was achieved.

This report includes recommendations for the 2022-2023 year.

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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 2021 to June 2022 by the Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by New Plymouth District Council (NPDC) for their various water supply schemes and water treatment plants (WTPs).

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by NPDC that relate to abstractions and discharges of water, and in-stream structures.

One of the intents of the *Resource Management Act 1991* (RMA) is that environmental management should be integrated across all media, so that a consent holder's use of water, air, and land should be considered from a single comprehensive environmental perspective. Accordingly, the Council generally implements integrated environmental monitoring programmes and reports the results of the programmes jointly. This report discusses the environmental effects of the NPDC's use of water and land, and is the 24th combined annual report by the Council for NPDC in relation to their water supply schemes.

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 RMA and the Council's obligations;
- the Council's approach to monitoring sites through annual programmes;
- the resource consents held by NPDC;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted at the sites.

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 2022-2023 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 social-economic 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 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 and administrative 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 2021-2022 year, consent holders were found to achieve a high level of environmental performance and compliance for 88% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 10% of the consents, a good level of environmental performance and compliance was achieved.¹

1.2 Process description

The WTPs operated by NPDC generally operate in the following manner. Raw water is abstracted, coarse screened, and passed through clarifiers for coagulation and flocculation (aided by the addition of a chemical flocculent at some plants) and filtration. At one plant, water is passed through cartridge filters. Chemicals are then used to adjust pH and chlorinate the water prior to distribution.

The waste products from backwashing of the filters (and clarifier bleed at some sites) are either discharged to land or to a surface waterway via a settling pond (or tank), or are contained in cartridges disposed of at landfills.

1.3 Resource consents

NPDC holds 20 resource consents for water abstraction, water and sludge discharges, and structures. These consents are listed in Table 1 along with the purpose of each consent and a process description for each plant. Plant locations are shown in Figure 1. 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 WTP permits held by NPDC during the period under review.

¹ The Council has used these compliance grading criteria for more than 18 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

Table 1 Summary of resource consent and processes

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process
New Plymouth	0672 - Discharge	-	2026	To discharge wastewater from a WTP into an unnamed tributary of the Mangorei Stream	<p>Raw water is abstracted from the Waiwhakaiho River via Lake Mangamahoe. The Waiwhakaiho River is diverted through a tunnel to augment the supply of Lake Mangamahoe. The consent for this diversion (2053) is held by Manawa Energy (previously Trustpower Limited) and monitoring of this is included in the Mangorei Hydroelectric Power Scheme monitoring programme.</p> <p>Two intakes in Lake Mangamahoe and one from a small lagoon off the main body of water supplies the New Plymouth WTP (NPWTP). Flocculent and coagulant is added and water passes through clarifiers and then sand filters. Water is disinfected (chlorine gas) and pH buffered (lime). Clarifier bleed and filter backwash is discharged to settling ponds in front of the plant. Supernatant is returned to the treatment plant. Accumulated sludge is periodically discharged to land. Following treatment, the water is piped to twelve distribution reservoirs which feed water through the reticulation network to households and businesses within the district.</p> <p>The Taranaki Regional Council has determined that these consents can become permitted activities, as the structure(s) non-compliance is marginal; the environmental effects would be no different if it did comply with Rule 52; and nobody is adversely affected by the non-compliance.</p>
	0673 - Discharge	-	2026	To discharge stormwater from a WTP into an unnamed tributary of the Mangorei Stream	
	2055 - Take	-	2021*	Take up to 60,480 m ³ /day, at a maximum rate of 740 L/s, from Lake Mangamahoe	
	6643 - Land use	-	2020*	To erect, place and maintain a weir in the Mangorei Stream	
	5699 – Land use DPA	-	-	To erect, place and maintain a pipebridge over the Mangorei Stream in the Waiwhakaiho catchment	

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process
	5700 – Land use DPA	-	-	To disturb the bed of the Mangorei Stream by trenching to erect, place and maintain a pipeline under the Mangorei Stream in the Waiwhakaiho Catchment	NPDC will need to maintain the structure to ensure that it continues to allow fish to pass upstream and downstream at all times, if applicable.
Inglewood	3934 - Take	-	2021*	To take water as a contingency supply and for farm supply purposes from an intake weir in the Ngatoro Stream	Raw water is abstracted via an infiltration gallery in the bed of the Ngatoro Stream approximately 1 km upstream of the Inglewood WTP. There is also a contingency take via a weir (with a fish pass) located approximately 3 km further upstream and is periodically used to backflush the infiltration gallery. This take is also used to provide untreated water for farm supplies for the Dudley Road Rural Users Group.
	4509 - Land use	-	2027	To maintain a water supply intake infiltration gallery in and adjacent to the Ngatoro Stream and to maintain a pipeline from the gallery to the water treatment station	The infiltration gallery consists of two slotted pipes buried under the stream bed. The two gallery pipe legs feed a pipeline that is gravity fed, which supplies the WTP.
	4510 - Take	-	2021*	To take up to 4,850 m ³ /day at 56 L/s from the Ngatoro Stream	Flocculent and coagulant is added to the raw water which is then passed through clarifiers and then sand filters. The water is pH buffered (lime) and disinfected (chlorine gas). Treated water is the stored in two reservoirs at the WTP site, and then

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process
	5188 – Land use	-	2015*	To maintain an existing weir in the Ngatoro Stream	gravity fed approximately 4 km to businesses and households in Inglewood. Clarifier bleed and filter backwash are discharged to a modified reservoir (1,250 m ³) which discharges to the Ngatoro Stream. Plant internal areas and chemical storage areas are drained to a sump which has a slide valve which blocks off a pipe leading to the nearby roadside drain. Probes are also contained within the sump to monitor the level of its contents. Water in the tank is tested and discharged to stormwater if appropriate. Otherwise the tank is emptied by a contractor to an appropriate facility.
	5869 - Discharge	-	2021*	To discharge clarifier bleed and filter backwash supernatant overflow from the Inglewood WTP into the Ngatoro Stream a tributary of the Manganui River, in the Waitara catchment	
Oakura	1277 - Discharge	-	2025	To discharge filter backwash from the Oakura WTP onto and into land in the vicinity of the Wairau Stream	Since April 2004 water has been taken from two secure bores. The water treatment process includes chlorination, pH control and addition of lime. The WTP has been upgraded to install cartridge filtration and UV disinfection, which was completed in 2021. Once treated, the water is piped to two reservoirs at the WTP.
	1278 - Take	2025	2031	Take and use water from the Wairau Stream for Oakura water supply purposes	Previously water was taken from a weir (with a fish pass) in the Wairau Stream and disinfected with chlorine gas. The surface water take and backwash discharge consents have been retained for contingency purposes, but have not been exercised since 2006.
	5713 - Land use	2025	2031	To use a weir to dam the Wairau Stream for Oakura water supply purposes	
	6114 – Take	-	2020*	To take and use groundwater from two bores for Oakura water supply purposes	

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process
Okato	0026 - Take	2025	2037	To take water from the Mangatete Stream for public water supply purposes	Water is drawn from an infiltration gallery and weir (with fish pass) under the river bank of the Mangatete Stream. The water is gravity fed to the WTP, and is passed through a two stage cartridge filtration, a UV sterilisation unit and then pH buffered (lime) and disinfected (chlorine gas) before being stored in a reservoir at the WTP.
	4805 – Land use	2024	2037	To dam water and use an existing weir in the Mangatete Stream for water supply purposes and to undertake maintenance on the weir.	
Waitara Industrial	0126 - Take	2024	2031	To take and use water from the Waiongana Stream to supply water for industry in Waitara	This supply has not been used since 2008, but has been retained for contingency purposes. Waitara and surrounding areas are currently being supplied from the NPWTP. When the scheme was operational, raw water was diverted from the Waiongana Stream via a weir (with a fish pass) near Mountain Road, approximately 9 km south of Waitara.
	4816 - Land use	-	2020*	To use and maintain an existing weir, fish pass and associated intake structures on the Waiongana Stream	Water was gravity fed through a settling pond system to a reservoir. There was no chemical treatment of the water.
Urenui	5989 - Land Use	-	2021*	To modify and maintain an existing earth retention structure (dam) on the Kakapo Stream	The treatment plant has been decommissioned and removed, with the Urenui water supply coming from the NPWTP. The weir has been maintained at the request of the landowner and has a fish pass.

* Consent is in the process of being renewed

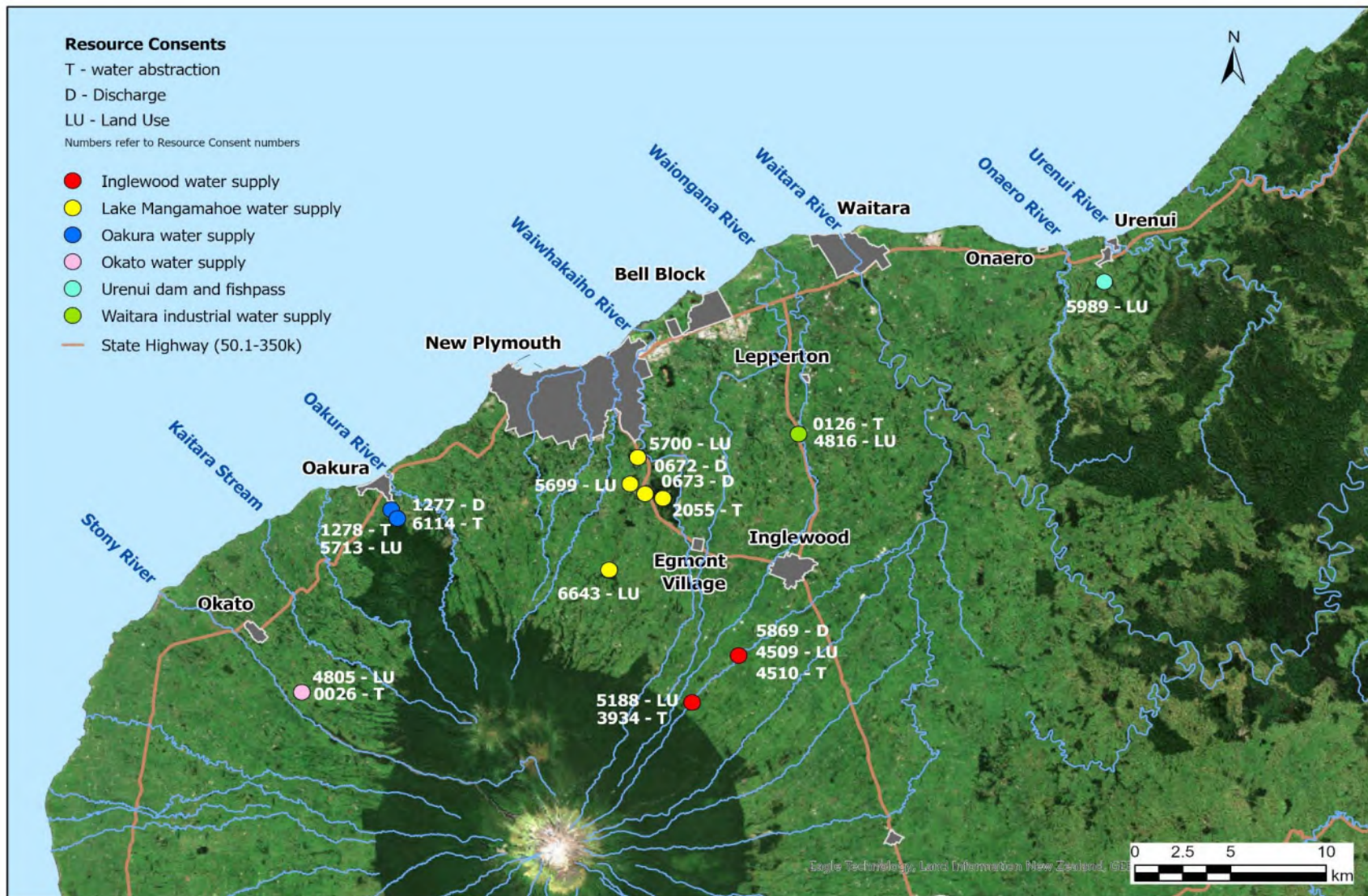


Figure 1 Location of New Plymouth District Council water supply plants and structures

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 NPDC's WTPs consisted of five 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

All NPDC WTPs and associated structures were each visited once during the monitoring period. With regard to consents for the abstraction of or 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 the consent holder 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 Discharge and water quality sampling

A stormwater sample was collected from the Inglewood WTP, along with samples upstream and downstream of the backwash discharge. A stormwater sample was also collected from the New Plymouth WTP.

1.4.5 Review of supplied flow and discharge data

NPDC provided Council with data on abstraction rates, stream flow, discharge rates and discharge quality which was reviewed by Council staff.

1.4.6 Fish survey

The Council undertakes fish surveys above and below weirs where consent conditions require the provision of fish passage. During the monitoring period, a spotlight fish survey was undertaken in the Wairau Stream.

2 Results

2.1 Programme liaison

Lake Mangamahoe fish screens history

Since 2017 NPDC has been liaising with the Council in regards to their three water intake screens in Lake Mangamahoe for the New Plymouth water supply. These screens cannot be manually inspected and NPDC provided information about the type of screens that were in place. It was noted at the time that these screens had screen sizes of 6 mm, which is greater than best practice guideline of 3 mm. NPDC had also observed fish in the water treatment plant raw water tanks, which suggested that these fish had come through the screens. NPDC acknowledged that the existing screens were not compliant with current best practice. NPDC put forward a proposal to allow 24 months to upgrade the intake screens, with two in the lake and one in the 'river' inlet, with work to be completed by June 2019, which Council accepted.

Ongoing discussions through to August 2018 saw NPDC apply for a variation of their consent to extend the timeframe for the installation of the fish screens to June 2020. This variation was granted in November 2018. In May 2019 NPDC advised that they were unlikely to meet this timeframe as a single project, as it would be out of step with an existing wider strategic plan to upgrade the infrastructure at the lake. As the consent was due to expire in June 2021, it was recommended that NPDC address these issues in their consent application. The application was to provide a timeline of when works would be expected to be completed. The Council also suggested that NPDC investigate the actual effect of the current screens and undertake an investigation into mitigation measures to be outlined in the consent application.

The consent renewal was received in February 2021, and provided a new date of June 2024 for when the screens would be installed. However in August 2022 NPDC approached Council about this timeframe and advised that it was likely that the two screens for the lake could be completed by June 2024, but the one in the 'river' would take some more time, as more work was required to determine the best approach. Further meetings were held between NPDC and Council, and it was decided that as the consent process had potential to take some time to complete, that an abatement notice would be issued to acknowledge the delay in the works being completed.

Once the new consent is granted, this would supersede the abatement notice, as it would have specified dates for when the intake screens would need to be fitted by. As the abatement notice was issued in September 2022, it will be discussed in further detail the 2022-2023 report.

2.2 Site inspections

An annual inspection of NPDC's water treatment activities were undertaken on 03 March and 05 April 2022. The inspections focussed on instream structures, discharges, and water abstraction measuring equipment.

2.2.1 New Plymouth

The flow in the Mangorei Stream weir was all flowing down the fish pass, with nothing over the weir. The water was clear and uncoloured, with some algae present. NPDC have advised that the weir will be removed in the future. Main intake 1 at Lake Mangamahoe had strong flow with 1,680 m³/hour recorded on meter. This was consistent with telemetered data received by Council. Water coming through the intakes appeared clear and uncoloured. Samples of stormwater were collected at the time of the inspection. Approximately 200 swans, ducks and geese were observed on the lake. The fish screens on the three intakes were unable to be assessed.

2.2.2 Inglewood

The contingency/farm supply intake weir (Photo 1) at the top of Dudley Road was inspected with the fish pass unobscured and the filters appearing clean. The Ngatoro Stream had a moderate flow and had clear, uncoloured water. At the main intake, the flow was moderate and uncoloured. The intake pipes were not observed due to the pipes being buried in the bed of the river. The intake flow rate of 100 m³/hr was in compliance with consent conditions and matched telemetered data. Discharge samples were collected at the time of the inspection.



Photo 1 Inglewood contingency/farm supply intake and weir in the Ngatoro Stream

2.2.3 Oakura

At the time of the inspection, no water was being abstracted from the bores, due to contractor's being onsite. A new bore was constructed in March 2020, but had not been commissioned as yet. This bore has replaced Bore 300, which had been sealed, as the bore casing and screens had cracks forming. Therefore abstraction for Oakura was solely from Bore 100. The weir on the Wairau Stream was checked. Water was clear and uncoloured, with the weir and fish pass unobstructed.

2.2.4 Okato

The flow in Mangatete Stream was running with a low to moderate flow, with clear and uncoloured water. The fish pass was unobscured and water was flowing freely over the weir. The water level reading and abstraction rate was consistent with telemetered data received by Council. At the time of the inspection, Level 1 water restrictions were in place.

2.2.5 Waitara industrial intake weir (contingency take site)

This system is a contingency only and has not been in operation since 2008. The river was clear and uncoloured, with adequate flow down the fish pass and with water freely flowing over the weir. The intake pipes have been sealed with concrete.

2.3 Discharge and receiving water monitoring

2.3.1 Inglewood WTP discharge monitoring

NPDC undertook self-monitoring of the backwash discharge at the Inglewood WTP as per 5869-2. The results are given in Table 2. All results complied with consent conditions.

Table 2 NPDC Inglewood backwash self-monitoring

Date	Suspended solids g/m ³	pH	Free available chlorine g/m ³
12-Jul-2021	3	7.3	0.03
11-Aug-2021	11	7.2	0.04
02-Sep-2021	5	7.3	ND
06-Oct-2021	16	7.2	ND
10-Nov-2021	ND	7.6	-
07-Dec-2021	20	6.7	ND
12-Jan-2022	14	7.3	0.03
02-Feb-2022	3	7.1	0.02
02-Mar-2022	3	7.5	ND
05-Apr-2022	3	7.1	0.06
08-Jun-2022	6	7.1	0.02
Consent limits	20	6 - 9	0.1

ND – Not detected

A discharge sample, as well as samples upstream and downstream of the discharge point were taken on 05 April 2022 by Council staff, with results shown in Table 3, and the locations of these shown in Figure 2.

Table 3 Results of Inglewood WTP discharge sampling 5 April 2022

Site Code	Temp (°C)	EC (µS/cm)	pH (pH)	Suspended solids (g/m ³)	Turbidity (FNU)
NGT000185	14.2	88	7.7	<3	0.41
NGT000186	14.6	88	7.7	<3	0.46
STW002037	15.3	90	7.5	-	1.08
Consent limits	-	-	6 - 9	20	-



Figure 2 Sampling locations for Inglewood WTP discharge

2.3.2 New Plymouth WTP discharge monitoring

The New Plymouth Water Treatment Plant (NPWTP) backwash ponds did not discharge during the 2021-2022 monitoring period, as they recycled the water back into the treatment plant, therefore no water quality sampling was undertaken as per consent 0672-3.

A stormwater discharge sample, as per consent 0673-3, was taken from the NPWTP (STW001127) on 05 April 2022 and these results are given in Table 4.

Table 4 Results of NPWTP stormwater sampling 5 April 2022

Parameter	Unit	Result	Consent limit
Chlorine	g/m ³	-	0.2
pH	-	7.1	6.0-9.0
Suspended solids	g/m ³	26	100
Temperature	°C	17.4	-
Total Alkalinity	g/m ³ as CaCO ₃	42	-
Turbidity	FNU	1.92	-

The results complied with consented limits.

2.4 Abstraction and stream flow data

2.4.1 Abstraction data

As a condition of their resource consents to abstract water, NPDC are required to record the daily volumes abstracted at each site. This data is to be made available to the Council on request. The data was assessed against either daily volumes and/or instantaneous take rates depending on consent conditions. A summary of compliance in regard to abstraction data is given in Table 5.

Table 5 Summary of compliance with abstraction data requirements and abstraction limits

Site	Consent	Maximum rate (consented rate) L/s	Maximum volume (consented volume) m ³ .day
Okato	0026-4	8.3 (13.8)	614 (1,000)
New Plymouth (Lake Mangamahoe)	2055-3	591 (740)	43,524 (60,480)
Inglewood - farmer and backwash take	3934-3	3.5 (5 rural) 73 (75 – total)	243 (400) 583 (5000 - contingency)
Inglewood - main take	4510-3	35 (56)	2,507 (4,850)
Oakura (groundwater)	6114-1 Bore 100	16.3 (35)	1,201 (3,715)
	6114-1 Bore 250	11.9 (35)	

A complete set of abstraction data for each site was provided via telemetry and there was a high level of compliance with daily volumes and instantaneous abstraction rates.

There was no abstraction from the Waiongana Stream in relation to the Waitara industrial supply (consent 0126-5) during the 2021-2022 monitoring period (used for contingency only).

2.4.2 Stream flow data

2.4.2.1 Okato Water Supply

Consent 0026-4, to take water from the Mangatete Stream for public water supply purposes, includes the following two conditions:

Condition 10

When the mean daily flow in the Mangatete Stream at the Saunders Road bridge is less than 180 L/s for a period of seven or more consecutive days, the consent holder shall enforce 'level 1' water restrictions. These restrictions may only be lifted when the mean daily flow is greater than 180 L/s for a period of seven or more consecutive days. 'Level 1' restrictions include:

- a. a total ban on using sprinklers, irrigation systems and unattended hoses; and
- b. partial restriction on using hand held hoses (using the odds and evens street address system).

Condition 11

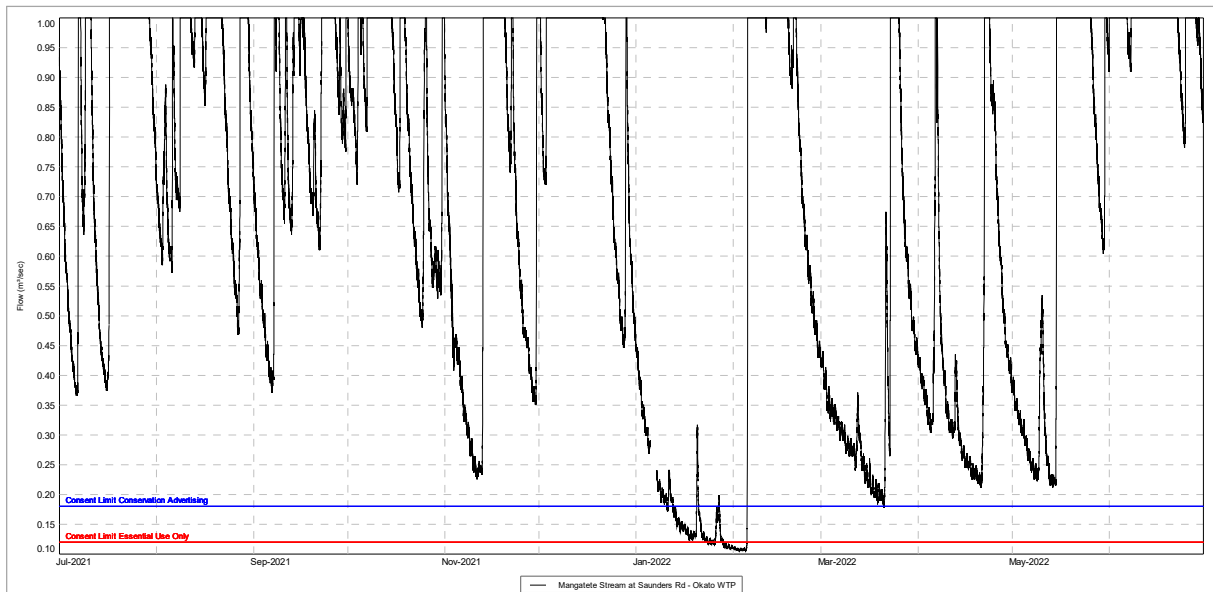
When the mean daily flow in the Mangatete Stream at the Saunders Road bridge is less than 120 L/s for a period of seven or more consecutive days, the consent holder shall enforce 'level 2' water restrictions. These restrictions may only be lifted when the mean daily flow is greater than 120 L/s for a period of seven or

more days. 'Level 2' restrictions include a total ban on using sprinklers, irrigation systems and hand held hoses.

NPDC monitor the stage of the Mangatete Stream at the Saunders Road Bridge and from this the stream flow is calculated from a rating that the Council provided. The Council conducts a minimum of three gaugings per year to maintain the rating curve.

During the 2021-2022 monitoring period mean daily flows fell below 180 L/s (Level 1 restriction) from 12 January to 30 January, and below 120 L/s (Level 2 restrictions) from 30 January to 2 February as shown in Figure 3.

However, as of the summer of 2016, NPDC has chosen to automatically implement water restrictions during the summer months (1 January to 31 March) to ensure maximum water conservation during the dry periods to ensure compliance with these conditions.



Note: restrictions are required to be implemented when flow has been below the relevant level for seven consecutive days

Figure 3 Flow in the Mangatete Stream at Saunders Rd during 2021-2022

2.4.2.2 Inglewood Water Supply

Consent 3934-3, to take water from the Ngatoro Stream for farm supply purposes and as a contingency supply, includes the following condition:

Condition 9

When the flow in the Ngatoro Stream at the 'Bushline' gauging site is less than 134 litres per second the taking of water shall be restricted to the minimum amount required to maintain the health of people and animals (i.e. garden watering and other non-essential uses are prohibited).

There is no water level and/or flow monitoring at the 'Bushline', however the Council monitors water level and flow of the Ngatoro Stream at SH3. By using a correlation between these two sites, a calculated flow can be estimated for the 'Bushline'. Based on this correlation, as shown in Figure 4 the flow did not fall below the 134 L/s limit, so no restrictions were required to be put in place.

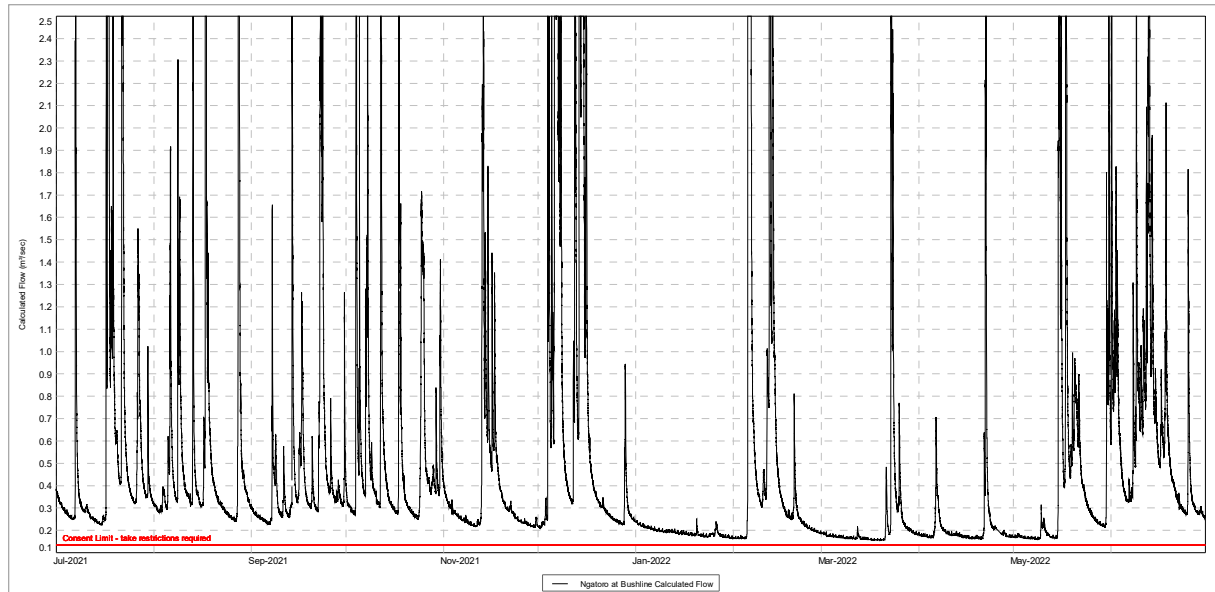


Figure 4 Calculated flow for Ngatoro Stream at Bush line during 2021-2022

2.5 Fish survey

During the period under review a spotlighting fish survey was undertaken in the Wairau Stream (in relation to the Oakura water supply).

Wairau Stream (Oakura water supply)

A spotlighting survey was performed on 24 February 2022 upstream and downstream of the Wairau Stream weir (Photo 2). This was a change to previous years where the electric fishing method had been used. At both upstream and downstream sites, there was good fish cover present, with the substrate dominated by boulders, cobbles and gravels.

Fish diversity and abundance was higher downstream of the weir, compared to that recorded upstream, by one species. The species diversity recorded for both sites was similar to that recorded in the previous survey in 2019, with the major difference being the absence of koaro in the current survey, which may be due to the change in survey method.

Sixteen banded kokopu were present above the weir, which is an indication that the weir is operating as required. Provided that regular inspections of the fish pass confirm that it is operating as required and being maintained, it is recommended that the fish monitoring be conducted triennially as per the scheduled compliance monitoring programme currently implemented. It is recommended that the spotlight method be maintained as it has shown to work well with short jaw and banded kokopu species, and that the addition of eDNA sampling to be included as a more time efficient option to identify if koaro are present, compared to the electric fishing method.

Copies of the fish survey report are available from the Council upon request.



Photo 2 Wairau Stream and fish pass

2.6 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 the consent holder. 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).

In the 2021-2022 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with NPDC's conditions in resource consents or provisions in Regional Plans.

3 Discussion

3.1 Discussion of site performance

During the monitoring period the NPDC water treatment plants were well run and organised. Abstraction data was provided to Council in a timely manner and the abstraction volumes and rates were in compliance with consent conditions.

Self-monitoring of the Inglewood WTP backwash found the results to be in compliance with consent limits. Suspended solid levels have been occasionally exceeded in past monitoring years and measures implemented by NPDC in the 2021-2022 year to prevent this appear to have been successful.

Stream flows fell below consented limits for the Okato WTP from 12 January to 2 February, which requires them to enforce water restrictions. However NPDC automatically enforce water restrictions from 1 January to 31 March, to ensure maximum water conservation during the drier period, so they were compliant in meeting their consent conditions.

Ongoing liaison with NPDC regarding the fish screens on the three water intakes for Lake Mangamahoe resulted in enforcement action being taken in September 2022, which will be discussed in further detail in the 2022-2023 report.

3.2 Environmental effects of exercise of consents

Overall there were no significant adverse impacts on the environment, occurring from the exercise of resource consents held by NPDC in relation to their WTPs and water supply schemes. This was supported by inspections of abstraction and discharge points, and supply weirs.

A fish survey undertaken in the Wairau Stream (in relation to the Oakura water supply) indicated that the presence of the weir was unlikely to be having any significant adverse effects on fish passage.

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 6-23.

3.3.1 New Plymouth WTP

Table 6 Summary of performance for Consent 0672-3

Purpose: To discharge wastewater from a water treatment plant into an unnamed tributary of the Mangorei Stream in the Waiwhakaiho catchment		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
2. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
3. Limits on pH, suspend solids and free chlorine in the discharge	No sampling undertaken, as all water recycled through plant	Yes
4. Discharge not to cause certain effects in the receiving waters	Inspection – no discharge	Yes
5. Lapse provision	N/A	N/A
6. Optional review provision	No further provision for review prior to expiry	N/A

Purpose: To discharge wastewater from a water treatment plant into an unnamed tributary of the Mangorei Stream in the Waiwhakaiho catchment		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 7 Summary of performance for Consent 0673-3

Purpose: To discharge stormwater from a water treatment plant into an unnamed tributary of the Mangorei Stream in the Waiwhakaiho catchment		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
2. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
3. Stormwater catchment area not to exceed 2 ha	Inspection and review of Management Plan	Yes
4. Requirement for a Stormwater Management Plan	WTP Emergency Management Plan – updated March 2022	Yes
5. Requirement for a Contingency Plan	WTP Emergency Management Plan – updated March 2022	Yes
6. Hazardous substance storage areas to be bunded with drainage to sumps	Inspection	Yes
7. Limits on pH, suspended solids and free chlorine in the discharge	Sampling and inspection	Yes
8. Discharge not to cause certain effects in the receiving waters	Inspection	Yes
9. Lapse provision	Not applicable	N/A
10. Optional review provision	No further provision for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 8 Summary of performance for Consent 2055-3

Purpose: To take up to 60,480 m³/ day at a maximum rate of 740 L/ sec of water from Lake Mangamahoe in the Waiwhakaiho Catchment for municipal water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes

Purpose: To take up to 60,480 m³/ day at a maximum rate of 740 L/ sec of water from Lake Mangamahoe in the Waiwhakaiho Catchment for municipal water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
2. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
3. Screening of intake structures to be completed by June 2020	Inspection	No
4. Install and maintain water meter and datalogger. Records sent to Council	Inspection and data review	Yes
5. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Improvement required
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 9 Summary of performance for Consent 6643-1

Purpose: To erect, place and maintain a weir in the Mangorei Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option	Liaison with consent holder	Yes
2. Exercise of consent in accordance with application	Liaison with consent holder	Yes
3. Review provision	Review not required	N/A
4. Annual inspection by consent holder and report to Council	Annual inspection was undertaken with Council staff, report not required	Yes
5. Notification of Council prior to maintenance works	No maintenance in monitoring year	N/A
6. Adoption of best practicable option	No maintenance in monitoring year	N/A
7. No maintenance to occur between 1 May to 31 October	No maintenance in monitoring year	N/A
8. Lapse provision	N/A	N/A
9. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

3.3.2 Inglewood WTP

Table 10 Summary of performance for Consent 3934-3

Purpose: To take water as a contingency supply and for farm supply purposes from an intake in the Ngatoro Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Limit on abstraction from Ngatoro Stream (for contingency take, gallery backwash and Dudley Road User Group)	Data review	Yes
2. Limit on the combined abstraction from Ngatoro Stream (including main abstraction from consent 4510)	Data review	Yes
3. Notification of use of contingency take	Liaison with consent holder	Yes
4. Install and maintain water meter and datalogger	Inspection	Yes
5. Certification of water meter installation	Meter NES verified	Yes
6. Notification of equipment failure	Liaison with consent holder	N/A
7. Access to water measuring device	Inspection	Yes
8. Recording and transmission of data	Data received	Yes
9. Restriction on abstraction during low flow	Restrictions imposed during periods of low flow	N/A
10. Adoption of best practicable option	Inspection, fish survey	Yes
11. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 11 Summary of performance for Consent 4509-2

Purpose: To maintain a water supply intake infiltration gallery in and adjacent to the Ngatoro Stream and to maintain a pipeline from the gallery to the water treatment station for Inglewood urban water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Any works to be undertaken between 1 November and 30 April only	Liaison with consent holder - no works undertaken during monitoring period	N/A
2. Notification to Council 48 hrs prior to maintenance works	Liaison with consent holder - no works undertaken during monitoring period	N/A
3. Minimise areas of disturbance	Liaison with consent holder - no works undertaken during monitoring period	N/A
4. Undertake works in accordance with guidelines	Liaison with consent holder - no works undertaken during monitoring period	N/A

Purpose: To maintain a water supply intake infiltration gallery in and adjacent to the Ngatoro Stream and to maintain a pipeline from the gallery to the water treatment station for Inglewood urban water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
5. Structure to be removed and area reinstated when no longer required	Not applicable - structure in use	N/A
6. Structure not to obstruct fish passage	Inspection	Yes
7. Lapse condition	Not applicable	N/A
8. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 12 Summary of performance for Consent 4510-2

Purpose: To take and use water from the Ngatoro Stream for Inglewood urban water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Abstraction not to exceed 4,850 m ³ /day or 56 L/s	Data review	Yes
2. Install and maintain water meter and datalogger	Inspection	Yes
3. Emergency take and notification	Liaison with consent holder	N/A
4. Provision of data to Council	Data received	Yes
5. Efficient and conservative use of water	Liaison with consent holder	Yes
6. Screening of intake structure to avoid entrapment of fish	Inspection	Yes
7. Lapse condition	Not applicable	N/A
8. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 13 Summary of performance for Consent 5188-1

Purpose: To license and maintain an existing weir structure in the Ngatoro Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Structure not to obstruct fish passage	Inspection	Yes
2. Optional review provision	Expired – S. 124 Protected	N/A

Purpose: To license and maintain an existing weir structure in the Ngatoro Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 14 Summary of performance for Consent 5869-2

Purpose: To discharge clarifier bleed and filter backwash supernatant overflow from the Inglewood WTP into the Ngatoro Stream		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Limit on discharge rate and duration	Data review	Yes
2. Adoption of best practicable option	Inspection	Yes
3. Prepare and adhere to management plan	Inspection and review of Management Plan – updated March 2022	Yes
4. Discharge not to cause certain effects in the receiving waters	Inspection	Yes
5. Limits on pH, suspended solids and free chlorine in the discharge	Consent holder self-monitoring	Yes.
6. Notification of changes at site	Inspection and liaison with consent holder	Yes
7. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

3.3.3 Oakura WTP

Table 15 Summary of performance for Consent 1277-3

Purpose: To discharge filter backwash from the Oakura WTP onto and into land in the vicinity of the Wairau Stream (contingency)		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option	Not assessed this period - consent not exercised	N/A
2. Exercise of consent in accordance with application	Not assessed this period - consent not exercised	N/A
3. Limits on pH, suspended solids and free chlorine in the discharge	Not assessed this period - consent not exercised	N/A
4. Discharge not to cause certain effects in the receiving waters	Not assessed this period - consent not exercised	N/A
5. Optional review provision	No further provision for review prior to expiry	N/A

Purpose: To discharge filter backwash from the Oakura WTP onto and into land in the vicinity of the Wairau Stream (contingency)		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

N/A = not applicable

Table 16 Summary of performance for Consent 1278-4

Purpose: To take and use water from the Wairau Stream for Oakura water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Abstraction as contingency measure only	No abstraction in monitoring year	N/A
2. Volume not to exceed 1,300 m ³ or 15 L/s	No abstraction in monitoring year	N/A
3. Install and maintain water meter and datalogger and records sent to Council	No abstraction in monitoring year	N/A
4. Meter installed, maintained and certified	No abstraction in monitoring year	N/A
5. Council to be notified if measuring and recording equipment breaks down	Liaison with consent holder	N/A
6. Water meter and data logger to be accessible to Council staff	No abstraction in monitoring year	N/A
7. Water records in suitable format	No abstraction in monitoring year	N/A
8. Payment of \$1,300 required when consent exercised	No abstraction in monitoring year	N/A
9. Adoption of best practicable option	No abstraction in monitoring year	N/A
10. Leak detection report	No abstraction in monitoring year	N/A
11. Optional review provision	Next option for review in June 2025	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

N/A = not applicable

Table 17 Summary of performance for Consent 5713-2

Purpose: To use a weir to dam the Wairau Stream for Oakura water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Maintenance of weir and fish pass in accordance with application	Inspection	Yes

Purpose: To use a weir to dam the Wairau Stream for Oakura water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
2. Screening of intake structure to avoid entrapment of fish	Inspection	Yes
3. Structure not to obstruct fish passage	Inspection and triennial fish survey	Yes
4. Optional review provision	Next option for review in June 2025	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 18 Summary of performance for Consent 6114-1

Purpose: To take and use groundwater from two bores for Oakura water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
3. Limits on volume and rate of abstraction	Data review	Yes
4. Abstraction not to have adverse effects on other known groundwater and surface water takes	Liaison with consent holder	Yes
5. Recording of abstraction rates and levels and make records available	Data received	Yes
6. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

3.3.4 Okato WTP

Table 19 Summary of performance for Consent 0026-4

Purpose: To take water from the Mangatete Stream for public water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Rate of take not to exceed 13.8 L/s, or a volume of 1,000 m ³ /day	Data review	Yes
2. Rate of take may increase to 1,200 m ³ /24 hours due to emergency	Data review – no excess used	Yes

Purpose: To take water from the Mangatete Stream for public water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
3. Notification of excess water take, including provision of a report with explanation	Data review – no excess used in 2021-2022	Yes
4. Installation and maintenance of water measuring equipment	Inspection	Yes
5. Certification of water meter installation	Meter NES verified	Yes
6. Notification of equipment failure	Liaison with consent holder	Yes
7. Water level recorded	Data review	Yes
8. Water records in suitable format	Data provided	Yes
9. Water level and abstraction data to be supplied to Council within two hours of being recorded	Data provided	Yes
10. Implementation of level 1 water restrictions for flows less than 180 L/s over seven days	Restrictions put in place by consent holder	Yes
11. Implementation of level 2 water restrictions when flow is less than 120 L/s over seven days	Restrictions put in place by consent holder	Yes
12. Report to be provided detailing level one and two water restrictions	Received January 2021, next due December 2023	Yes
13. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
14. Screening of intake structure to avoid entrapment of fish	Inspection	Yes
15. Financial contribution of two annual payments of \$10,000 to be used for environmental enhancement	First payment received July 2021	Yes
16. Optional review provision	Next option for review in June 2025	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 20 Summary of performance for Consent 4805-3.0

Purpose: To dam water and use an existing weir in the Mangatete Stream for water supply purposes and to undertake maintenance on the weir		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Exercise of consent in accordance with application	Inspection and liaison with consent holder	Yes
2. Repair any scour or erosion caused by weir	Inspection	Yes

Purpose: To dam water and use an existing weir in the Mangatete Stream for water supply purposes and to undertake maintenance on the weir		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
3. Structure not to obstruct fish passage	Inspection and triennial fish survey	Yes
4. Maintenance works not to obstruct fish passage	Inspection and liaison with consent holder – work completed	N/A
5. Maintenance works to be completed by May 2020	Liaison with consent holder – work completed	N/A
6. Notification of works	Liaison with consent holder - no works undertaken during monitoring period	N/A
7. Minimise areas of disturbance	Liaison with consent holder - no works undertaken during monitoring period	N/A
8. Minimise effects to receiving waters	Liaison with consent holder - no works undertaken during monitoring period	N/A
9. Optional review provision	Next option for review in June 2024	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

N/A = not applicable

3.3.5 Waitara industrial supply

This is a contingency supply and was not utilised in the monitoring period under review.

Table 21 Summary of performance for Consent 0126-5

Purpose: To take and use water from the Waiongana Stream to supply water for industry in Waitara		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Rate of take to not exceed 58 L/s	No abstraction in monitoring year	N/A
2. Notification prior to exercise of consent	No abstraction in monitoring year	N/A
3. Installation of data logger and water meter	To be installed prior to exercise of consent	N/A
4. Certification of water meter installation	To be verified prior to exercise of consent	N/A
5. Notification of equipment failure	No abstraction in monitoring year	N/A
6. Water meter and data logger to be accessible to Council staff	To be installed before consent exercised	N/A
7. Records in suitable format and provision of data	No abstraction in monitoring year	N/A
8. Restrictions on abstraction due to low flow	No abstraction in monitoring year	N/A

Purpose: To take and use water from the Waiongana Stream to supply water for industry in Waitara		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
9. Cessation of abstraction if river flow <402 L/s	No abstraction in monitoring year	N/A
10. Adoption of best practicable option	Inspection	N/A
11. Screening of intake structure to avoid entrapment of fish	Consent not exercised	N/A
12. Financial contribution if consent exercised	None required as consent not exercised	N/A
13. Report required if consent exercised	Due 30 April 2024, if consent exercised	N/A
14. Lapse provision	Lapse in 2031	N/A
15. Optional review provision	Next option for review in June 2024	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

N/A = not applicable

Table 22 Summary of performance for Consent 4816-2

Purpose: To use and maintain an existing weir, fish pass and associated intake structures on the Waiongana Stream for Waitara Industrial water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Notification of Council prior to maintenance works	No maintenance in monitoring year	N/A
2. Adoption of best practicable option	Inspection	Yes
3. Minimising of area and volume of river disturbance during maintenance and reinstatement of disturbed areas	No maintenance in monitoring year	N/A
4. Maintenance work not to be conducted between 1 May and 31 October unless waived in writing	No maintenance in monitoring year	N/A
5. Maintenance of structures to ensure compliance with consent conditions	Inspection	Yes
6. Structure not to restrict fish passage	Inspection and triennial fish surveys	Yes
7. Structure to be removed when no longer required and area to be reinstated	Retained for contingency supply- abstraction consent still in place	N/A
8. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

3.3.6 Urenui dam

Table 23 Summary of performance for Consent 5989-1

Purpose: <i>To modify and maintain an existing earth retention structure (dam) on the Kakapo Stream</i>		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Notification of Council prior to maintenance works	Liaison with consent holder	N/A
2. Structure not to obstruct fish passage	Not monitored during period under review	N/A
3. Adoption of best practicable option	No maintenance in monitoring year	N/A
4. Area and volume of river bed disturbance minimised	No maintenance in monitoring year	N/A
5. Maintenance of structure to ensure compliance with consent conditions	No maintenance in monitoring year	N/A
6. Removal of structure when no longer required	Not applicable - weir held as contingency	N/A
7. Optional review provision	Expired – S. 124 Protected	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		N/A

N/A = not applicable

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

3.4 Recommendations from the 2020-2021 Annual Report

In the 2020-2021 Annual Report, it was recommended:

1. THAT the monitoring programme for consents associated with New Plymouth District Council's WTPs and water supply schemes in the 2021-2022 monitoring year remain unchanged from that for 2020-2021.
2. THAT eDNA analysis be undertaken in any future fish surveys.
3. THAT should there be issues with environmental or administrative performance in 2021-2022 monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
4. THAT the option for a review of resource consent 0026-4 in June 2022, as set out in condition 16 of the consent, not be exercised, on the grounds that the current conditions are sufficient.

Recommendations one and four were implemented, while recommendation two was not implemented, due to it not being considered at the time of the survey. Recommendation three was not implemented, as it was considered not necessary to carry out further monitoring or investigations.

3.5 Alterations to monitoring programmes for 2022-2023

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.

No planned changes have been made to the 2022-2023 monitoring programme. In addition to the current fish survey monitoring schedule, it is recommended that eDNA analysis be undertaken where available during any future fish surveys to determine the presence or absence of species.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the sites 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 2022-2023.

4 Recommendations

1. THAT in the first instance, monitoring of consented activities associated with New Plymouth District Council's WTPs and water supply schemes in the 2022-2023 year continue at the same level as in 2021-2022.
2. THAT eDNA analysis may be undertaken during future fish surveys.
3. 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.

Glossary of common terms and abbreviations

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

Bund	A wall around a tank to contain its contents in the case of a leak.
Conductivity	An indication of the level of dissolved salts in a sample, usually measured at 25°C and expressed in mS/m.
eDNA	A method for identifying the presence of local flora and fauna by analysing DNA fragments in a water sample.
Elver	A young eel, especially one that is migrating up a stream from the ocean.
FNU	Formazin Nephelometric Unit, a measure of the turbidity of water
g/m ³	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.
L/s	Litres per second.
Incident Register	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 regional plan.
mS/m	Millisiemens per metre.
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.
NES	National Environmental Standard.
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 (Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	<i>Resource Management Act 1991</i> and including all subsequent amendments.

SS	Suspended solids.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in FNU.

For further information on analytical methods, contact an Environment Quality Manager.

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Appendix I

Resource consents held by NPDC

(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.

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Consent Granted 30 May 2008
Date:

Conditions of Consent

Consent Granted: To discharge wastewater from a water treatment plant into
an unnamed tributary of the Mangorei Stream in the
Waiwhakaiho catchment at or about (NZTM)
1696185E-5669305N

Expiry Date: 1 June 2026

Review Date(s): June 2014, June 2020

Site Location: Junction Road, New Plymouth

Legal Description: Lot 1 DP 10097 Blk X Paritutu SD

Catchment: Waiwhakaiho

Tributary: Mangorei

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. Notwithstanding any other condition of this consent, 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 adverse effects on the environment from the exercise of this consent.
2. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 5038. In the case of any contradiction between the documentation submitted in support of application 5038 and the conditions of this consent, the conditions of this consent shall prevail.
3. The following concentrations shall not be exceeded in the discharge:

Component	Concentration
pH (range)	6.0 – 9.0
suspended solids	100 gm ⁻³
free chlorine	0.2 gm ⁻³

This condition shall apply prior to the entry of the wastewater into the receiving waters of the unnamed tributary, at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

4. After allowing for reasonable mixing, within a mixing zone extending 15 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - 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.

Consent 0672-3

5. This consent shall lapse on the expiry of five years after the date of issue of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
6. 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 2014 and/or June 2020, 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 30 May 2008

For and on behalf of
Taranaki Regional Council

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Consent Granted 30 May 2008
Date:

Conditions of Consent

Consent Granted: To discharge stormwater from a water treatment plant into
an unnamed tributary of the Mangorei Stream in the
Waiwhakaiho catchment at or about (NZTM)
1696185E-5669305N

Expiry Date: 1 June 2026

Review Date(s): June 2014, June 2020

Site Location: Junction Road, New Plymouth

Legal Description: Lot 1 DP 10097 Blk X Paritutu SD

Catchment: Waiwhakaiho

Tributary: Mangorei

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. Notwithstanding any other condition of this consent, 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 adverse effects on the environment from the exercise of this consent.
2. The exercise of this consent shall be undertaken substantially in accordance with the documentation submitted in support of application 5001. In the case of any contradiction between the documentation submitted in support of application 5001 and the conditions of this consent, the conditions of this consent shall prevail.
3. The stormwater discharged shall be from a catchment area not exceeding 2 hectares.
4. The consent holder shall maintain a stormwater management plan. This plan shall document how the site is to be managed in order to minimise the contaminants that become entrained in the stormwater to the satisfaction of the Chief Executive, Taranaki Regional Council.
5. The consent holder shall maintain a contingency plan. The plan shall detail measures and procedures to be undertaken to prevent spillage or accidental discharge of contaminants not licensed by this consent, and measures to avoid, remedy or mitigate the environmental effects of such a discharge, to the satisfaction of the Chief Executive, Taranaki Regional Council.
6. Any above ground hazardous substances storage areas shall be bunded with drainage to sumps, or other appropriate recovery systems, and not to the stormwater catchment.

Consent 0673-3

7. The following concentrations shall not be exceeded in the discharge:

Component	Concentration
pH (range)	6.0 – 9.0
suspended solids	100 gm ⁻³
free chlorine	0.2 gm ⁻³

This condition shall apply prior to the entry of the stormwater into the receiving waters of the unnamed tributary, at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

8. After allowing for reasonable mixing, within a mixing zone extending 15 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
- the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - any conspicuous change in the colour or visual clarity;
 - any emission of objectionable odour;
 - the rendering of fresh water unsuitable for consumption by farm animals;
 - any significant adverse effects on aquatic life.
9. This consent shall lapse on the expiry of five years after the date of issue of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
10. 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 2014 and/or June 2020, 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 30 May 2008

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of Consent Holder:	New Plymouth District Council Private Bag 2025 New Plymouth 4342	
Decision Date (Change):	22 November 2018	
Commencement Date (Change):	22 November 2018	(Granted Date: 25 June 2002)

Conditions of Consent

Consent Granted:	To take up to 60,480 cubic metres per day at a maximum rate of 740 litres/second of water from Lake Mangamahoe in the Waiwhakaiho catchment for municipal water supply purposes	
Expiry Date:	1 June 2021	
Site Location:	Lake Mangamahoe, Junction Road, New Plymouth	
Grid Reference (NZTM)	1697120E-5669050N	
Catchment:	Waiwhakaiho	
Tributary:	Mangamahoe Lake Mangamahoe	

*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 exercise of this consent shall be conducted in accordance with the information submitted in support of the application and to ensure that the conditions of the consent are met at all times.
2. The consent holder shall at all times adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to avoid or minimise any adverse effects on the environment as a result of the exercise of this consent.
3. All intake structures shall be screened to avoid the entrainment of fish in accordance with best practice by June 2020.
4. The consent holder shall install and operate a measuring device capable of accurately recording daily rates of abstraction and shall measure, record and make such records available to the Chief Executive, Taranaki Regional Council, upon request.
5. 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 2006 and/or June 2011 and/or June 2016, 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 22 November 2018

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 1 August 2005

Conditions of Consent

Consent Granted: To erect, place and maintain a weir in the Mangorei Stream
in the Waiwhakaiho catchment at or about GR: P19:044-
268

Expiry Date: 1 June 2020

Review Date(s): June 2008, June 2014

Site Location: Scout Road, Korito, New Plymouth

Legal Description: Sec 96 Hua & Waiwhakaiho Hun Blk II Egmont SD

Catchment: Waiwhakaiho

Tributary: Mangorei

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

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 adverse effects on the environment from the exercise of this consent.
2. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 3838. In the case of any contradiction between the documentation submitted in support of application 3838 and the conditions of this consent, the conditions of this consent shall prevail.
3. This consent may be reviewed at any time should monitoring show that brown trout densities upstream of the structure are increasing or if there are significant adverse effects on conservation values upstream of the structure or if the structure is found to be no longer necessary for the conservation of native fish biodiversity.
4. The consent holder shall undertake annual inspections of the structure authorised by this resource consent and provide a report to the satisfaction of the Chief Executive, Taranaki Regional Council.
5. The consent holder shall notify the Chief Executive, Taranaki Regional Council, at least 48 hours prior to any maintenance works of the structure licensed by this consent which would involve disturbance of, or deposition to, the streambed or discharges to water.
6. The consent holder, during any maintenance works, shall adopt the best practicable option, as defined in section 2 of the Resource Management Act 1991, to avoid or minimise the discharge of silt or other contaminants into water or onto the streambed and to avoid or minimise the disturbance of the streambed and any adverse effects on water quality.
7. No maintenance work shall be conducted during the period 1 May to 31 October unless waived in writing by the Chief Executive, Taranaki Regional Council.
8. This consent shall lapse on the expiry of five years after the date of issue of this consent, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
9. 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

Consent 6643-1

the conditions of this resource consent by giving notice of review during the month of June 2008 and/or June 2014, 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 1 August 2005

For and on behalf of
Taranaki Regional Council

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 9 November 2000

Conditions of Consent

Consent Granted: To erect, place and maintain a pipebridge over the
Mangorei Stream in the Waiwhakaiho catchment at or
about GR: P19:055-316

Expiry Date: 1 June 2020

Review Date(s): June 2002, June 2008, June 2014

Site Location: Mangorei Road, New Plymouth

Legal Description: Lot 1 DP 9635 Pt Sec 773 Grey Dist Blk IX Paritutu SD

Catchment: Waiwhakaiho

Tributary: Mangorei

General conditions

- a) That on receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

- 1. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to the commencement and upon completion of the initial construction and again prior to and upon completion of any subsequent maintenance works which would involve disturbance of or deposition to the riverbed or discharges to water.
- 2. The structure[s] authorised by this consent shall be constructed generally in accordance with the documentation submitted in support of the application and shall be maintained to ensure the conditions of this consent are met.
- 3. The consent holder shall adopt the best practicable option to avoid or minimise the discharge of silt or other contaminants into water or onto the riverbed and to avoid or minimise the disturbance of the riverbed and any adverse effects on water quality.
- 4. The consent holder shall ensure that the area and volume of riverbed and bank disturbance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as is practicable, be reinstated, including riparian vegetation.
- 5. The structure[s] authorised by this consent shall be removed and the area reinstated, if and when the structure[s] are no longer required. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to structure[s] removal and reinstatement.
- 6. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2002 and/or June 2008 and/or June 2014, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this 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 9 November 2000

For and on behalf of
Taranaki Regional Council

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted 30 January 2001
Date:

Conditions of Consent

Consent Granted: To disturb the bed of the Mangorei Stream by trenching to erect, place and maintain a pipeline under the Mangorei Stream in the Waiwhakaiho catchment at or about GR: P19:059-331

Expiry Date: 1 June 2020

Review Date(s): June 2002, June 2008, June 2014

Site Location: Junction Road, New Plymouth

Legal Description: Pt Lot 1 DP 6447 Blk X Paritutu SD

Catchment: Waiwhakaiho

Tributary: Mangorei

Consent 5700-1

General conditions

- a) That on receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to the commencement and upon completion of the initial construction and again prior to and upon completion of any subsequent maintenance works which would involve disturbance of or deposition to the riverbed or discharges to water.
2. The structure[s] authorised by this consent shall be constructed generally in accordance with the documentation submitted in support of the application and shall be maintained to ensure the conditions of this consent are met.
3. The disturbance of parts of the riverbed covered by water and/or any works which may result in downstream discolouration of water shall only be undertaken between the period 1 November and 30 April, except where this requirement is waived in writing by the Chief Executive, Taranaki Regional Council.
4. The consent holder shall adopt the best practicable option to avoid or minimise the discharge of silt or other contaminants into water or onto the riverbed and to avoid or minimise the disturbance of the riverbed and any adverse effects on water quality.
5. The consent holder shall ensure that the area and volume of riverbed and bank disturbance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as is practicable, be reinstated, including riparian vegetation.
6. The structure[s] authorised by this consent shall be removed and the area reinstated, if and when the structure[s] are no longer required. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to structure[s] removal and reinstatement.
7. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2002 and/or June 2008 and/or June 2014, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this 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 30 January 2001

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
New Plymouth 4342

Decision Date: 29 February 2016

Commencement Date: 29 February 2016

Conditions of Consent

Consent Granted: To take water as a contingency supply and for farm supply
purposes from an intake weir in the Ngatoro Stream

Expiry Date: 1 June 2021

Review Date(s): June 2018

Site Location: Dudley Road, Inglewood

Grid Reference (NZTM) 1698662E-5657635N

Catchment: Waitara

Tributary: Manganui
Ngatoro

*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. This consent authorises taking:
 - (a) at a maximum rate of 5 litres per second, up to a maximum of 400 m³ in any 24 hour period ending at midnight (New Zealand Standard Time), for a water supply to the Dudley Road Rural Users Group;
 - (b) of up to 5000 m³ in any 24 hour period ending at midnight (New Zealand Standard Time), when the taking authorised by consent 4510 (the main Inglewood water supply intake) can not occur due to necessary maintenance or equipment failure; and
 - (c) at a maximum of 70 litres per second for up to 3 hours for the purpose of back flushing the infiltration gallery at the main Inglewood water supply intake.
2. The rate of taking pursuant to this consent in combination with consent 4510 (the main Inglewood supply intake) shall not exceed 75 litres per second.
3. The consent holder shall notify the Chief Executive, Taranaki Regional Council by emailing worknotification@trc.govt.nz as soon as practicable if any water is to be, or has been, taken pursuant to condition 1(b) above. Notification shall include the consent number, the date that water will be/was first taken, and the circumstances that have necessitated the taking.
4. Before 1 July 2016, the consent holder shall install, and thereafter maintain water meters and dataloggers at sites established in accordance with Regulation 10 of the *Resource Management (Measurement and Reporting of Water Takes) Regulations 2010*. The water meters and dataloggers shall be tamper-proof and shall measure and record the rate and volume of water taken for each of the uses described in condition 1, to an accuracy of $\pm 5\%$. Records of the date, the time and the rates and volumes of water taken at intervals not exceeding 15 minutes, shall be made available to the Chief Executive, Taranaki Regional Council at all reasonable times.

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.

Consent 3934-3.0

5. 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 and/or maintained in accordance with the manufacturer's specifications; and/or
- (b) 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.
6. 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.
7. Any water meter or datalogger shall be accessible to Taranaki Regional Council officers at all reasonable times for inspection and/or data retrieval. In addition the data logger shall be designed and installed so that Taranaki Regional Council officers can readily verify that it is accurately recording the required information.
8. 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;
 - (b) specifically record the water taken as 'zero' when no water is taken: and
 - (c) be transmitted to the Taranaki Regional Council's computer system within two hours of being recorded.
9. When the flow in the Ngatoro Stream at the 'Bushline' gauging site is less than 134 litres per second the taking of water shall be restricted to the minimum amount necessary to maintain the health of people and animals (i.e. garden watering and other non-essential uses are prohibited).
10. 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 3934-3.0

11. 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 2018 for the purposes 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 29 February 2016

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Consent Granted
Date: 12 June 2009

Conditions of Consent

Consent Granted: To maintain a water supply intake infiltration gallery in and adjacent to the Ngatoro Stream a tributary of the Manganui River in the Waitara catchment and to maintain a pipeline from the gallery to the water treatment station for Inglewood urban water supply purposes at or about (NZTM) 1701081E-5660275N

Expiry Date: 1 June 2027

Review Date(s): June 2015, June 2021

Site Location: Dudley Road, Inglewood

Legal Description: Pt Sec 17 Blk VIII Egmont SD

Catchment: Waitara

Tributary: Manganui
Ngatoro

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. Any disturbance of parts of the riverbed covered by water and/or any works which may result in downstream discolouration of water shall be undertaken only between 1 November and 30 April, except where this requirement is waived in writing by the Chief Executive, Taranaki Regional Council.
2. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to the commencement and upon completion of maintenance works which would involve disturbance of or deposition to the riverbed or discharges to water. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz.
3. The consent holder shall ensure that the area and volume of riverbed disturbance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as is practicable, be reinstated.
4. The consent holder shall take all reasonable steps to:
 - a. minimise the amount of sediment discharged to the stream;
 - b. minimise the amount of sediment that becomes suspended in the stream; and
 - c. mitigate the effects of any sediment in the stream.

Undertaking work in accordance with *Guidelines for Earthworks in the Taranaki region*, by the Taranaki Regional Council, will achieve compliance with this condition.

5. Except with the written agreement of the Chief Executive, Taranaki Regional Council, the structure[s] authorised by this consent shall be removed and the area reinstated, if and when the structure is no longer required. A further resource consent may be required to authorise the removal of the structure, and the consent holder is advised to seek advice from the Council on this matter.
6. The exercise of this consent shall not restrict the passage of fish.

Consent 4509-2

7. This consent shall lapse on 30 June 2014, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.
8. 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 2015 and/or June 2021, 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 12 June 2009

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Consent Granted
Date: 12 June 2009

Conditions of Consent

Consent Granted: To take and use water from the Ngatoro Stream a tributary
of the Manganui River in the Waitara catchment, for
Inglewood urban water supply purposes at or about
(NZTM) 1701081E-5660275N

Expiry Date: 1 June 2021

Review Date(s): June 2015

Site Location: Dudley Road, Inglewood

Legal Description: Pt Sec 17 Blk VIII Egmont SD

Catchment: Waitara

Tributary: Manganui
Ngatoro

Consent 4510-2

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. Subject to condition 3, the volume of water taken shall not exceed 4,850 cubic metres per day, at a rate not exceeding 56 litres per second.
2. The consent holder shall maintain a water meter and a datalogger. The water meter and a datalogger shall be tamper-proof and shall measure and record the rate and volume of water taken to an accuracy of $\pm 5\%$.
3. The consent holder shall be allowed to take up to 70 litres per second when it is necessary in emergency cases, provided previous notification is made to the Chief Executive of the Taranaki Regional Council. Notification shall be made by e-mailing worknotification@trc.govt.nz 24 hours of the emergency abstraction commencing. Notification shall include the consent number and a brief description of the activity consented.
4. The consent holder shall make available electronic records of water taken to the Council at a frequency and in a format to be advised by the Chief Executive Taranaki Regional Council.
5. Notwithstanding the terms and conditions of this consent the consent holder shall take all reasonable steps to avoid, remedy or mitigate any adverse effect on the environment arising from the exercise of this consent, including, but not limited to, the efficient and conservative use of water
6. The consent holder shall ensure that the intake structure is appropriately screened to avoid the entrainment of fish.
7. This consent shall lapse on 30 June 2014, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

Consent 4510-2

8. 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 2015, 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 12 June 2009

For and on behalf of
Taranaki Regional Council

Director-Resource Management

TRK975188

LAND USE CONSENT

**Pursuant to the RESOURCE MANAGEMENT ACT 1991
a resource consent is hereby granted by the
Taranaki Regional Council**

Name of: NEW PLYMOUTH DISTRICT COUNCIL
Consent Holder: PRIVATE BAG 2025 NEW PLYMOUTH

Consent
Granted Date: 19 September 1997

CONDITIONS OF CONSENT

Consent Granted: TO LICENSE AND MAINTAIN AN EXISTING WEIR STRUCTURE IN
THE NGATORO STREAM A TRIBUTARY OF THE MANGANUI
RIVER IN THE WAITARA CATCHMENT AT OR ABOUT GR:
P20:088-197

Expiry Date: 1 June 2015

Review Date[s]: June 2003 and June 2009

Site Location: NGATORO STREAM UPPER DUDLEY ROAD, INGLEWOOD

Legal Description: LOT 1 DP8522 BLK XI EGMONT SD

Catchment:	WAITARA	395.000
Tributary:	MANGANUI	395.040
	NGATORO	395.045

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

TRK975188

General conditions

- a) That on receipt of a requirement from the General Manager, Taranaki Regional Council (hereinafter the General Manager), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

- 1. THAT the consent holder shall maintain the weir to enable the passage of native fish, juvenile trout and adult trout.
- 2. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during June 2003 and/or June 2009, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects of the structure on the environment, which were not foreseen at the time of granting the consent and which it was not appropriate to deal with at that time.

Signed at Stratford on 19 September 1997

For and on behalf of
TARANAKI REGIONAL COUNCIL

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
Consent Holder: New Plymouth District Council
Private Bag 2025
New Plymouth 4342

Decision Date: 29 February 2016

Commencement Date: 29 February 2016

Conditions of Consent

Consent Granted: To discharge clarifier bleed and filter backwash supernatant
overflow from the Inglewood water treatment plant into the
Ngatoro Stream

Expiry Date: 1 June 2021

Review Date(s): June 2018

Site Location: Dudley Road, Inglewood

Grid Reference (NZTM) 1701945E-5660972N

Catchment: Waitara

Tributary: Manganui
Ngatoro

*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 discharge shall for no more than 3 hours per day, at a rate not exceeding 125 m³ per hour.
2. 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 adverse effects on the environment from the exercise of this consent.
3. At all times after 30 April 2016, the site shall be operated in accordance with a 'Management Plan' prepared by the consent holder and approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The plan shall detail how the site will be managed to achieve compliance with the conditions of this consent and shall include as a minimum:
 - (a) a schedule of sampling of the discharge;
 - (b) details of maintenance and operation of the settlement facility;
 - (c) a schedule of monitoring of sediment levels in the reservoir; and
 - (d) a programmed cleaning regime.
4. After allowing for reasonable mixing, within a mixing zone extending 25 metres downstream of the discharge point, the discharge shall not, either by itself or in combination with other discharges, give rise to any or all of the following effects in the receiving water:
 - (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.
5. Constituents of the discharge shall meet the standards shown in the following table.

Constituent	Standard
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

This condition shall apply before entry of the treated stormwater into the receiving waters at a designated sampling point approved by the Chief Executive, Taranaki Regional Council.

Consent 5869-2.0

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, or the chemicals used or stored on site that could alter the nature of the discharge. 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.
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 2018 for the purposes 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 29 February 2016

For and on behalf of
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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4600

Consent Granted 11 December 2006
Date:

Conditions of Consent

Consent Granted: To discharge filter backwash from the Oakura Water
Treatment Plant onto and into land in the vicinity of the
Wairau Stream at or about GR: P19:930-301

Expiry Date: 1 June 2025

Review Date(s): June 2013, June 2019

Site Location: Main South Road, Oakura

Legal Description: Sec 13 Pt Sec 14 30 Oakura Dist Blk II Wairau SD

Catchment: Wairau

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

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 adverse effects on the environment from the exercise of this consent.
2. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 4477. In the case of any contradiction between the documentation submitted in support of application 4477 and the conditions of this consent, the conditions of this consent shall prevail.
3. The discharge quality shall not exceed the following limits at all times:

Component	Concentration
Suspended solids	100 g/m ³
Free available chlorine	0.2 g/ m ³
pH	6-9

4. The discharge shall not give rise to any of the following effects in the Wairau 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.

Consent 1277-3

5. 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 2013 and/or June 2019, 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 11 December 2006

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Decision Date: 12 September 2013

Commencement Date: 12 September 2013

Conditions of Consent

Consent Granted: To take and use water from the Wairau Stream for Oakura
water supply purposes

Expiry Date: 1 June 2031

Review Date(s): June 2019, June 2025

Site Location: Upper Wairau Road, Oakura

Legal Description: Pt Sub 2 Sec 170 Oakura Dist (Site of take)

Grid Reference (NZTM) 1683254E-5667943N

Catchment: Wairau

*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 [the Council] all the administration, monitoring and supervision costs of this consent, fixed in accordance with section 36 of the Resource Management Act.

Special conditions

1. The water abstraction shall only be exercised as a contingency measure, when the groundwater bores are unable to provide sufficient water to the Oakura supply scheme.
2. The volume of water abstracted shall not exceed 1,300 cubic metres/day and the rate shall not exceed 15 litres/second.
3. Before exercising this consent the consent holder shall install, and thereafter maintain a water meter and a datalogger at the site of taking. The water meter and datalogger shall be tamper-proof and shall measure and record the rate and volume of water taken to an accuracy of $\pm 5\%$. Records of the date, the time and the rate and volume of water taken at intervals not exceeding 15 minutes, shall be made available to the Chief Executive, Taranaki Regional Council at all reasonable times/ on an annual basis.

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 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 and/or maintained in accordance with the manufacturer's specifications; and/or
 - (b) 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.
5. 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.
6. The water meter and datalogger shall be accessible to Taranaki Regional Council officer's at all reasonable times for inspection and/or data retrieval.

Consent 1278-4

7. 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.
8. During any 12-month period ending on 30 June in which this consent is exercised, the consent holder shall make a payment of \$1300 (plus GST) to the Taranaki Regional Council as a financial contribution. The financial contribution shall be used to remedy or mitigate adverse environmental effects of the taking in the Wairau Stream catchment. The financial contribution shall be adjusted in accordance with the Consumer Price Index (or similar) so that the real value of the payment remains the same.
9. 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
10. 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.
11. The Taranaki Regional Council may review, under section 128 of the Resource Management Act, 1991:
 - (a) Condition 2 to assess water use requirements in June 2019 and /or June 2025; and
 - (b) Any or all of the conditions of this consent by giving notice of review during the month of June 2019 and /or June 2025, for the purpose of ensuring that the conditions are adequate to deal with any significant adverse effects on the environment arising from the exercise of this consent, which either were 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 12 September 2013

For and on behalf of
Taranaki Regional Council

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted 13 June 2001
Date:

Conditions of Consent

Consent Granted: To erect, place and maintain a weir in the Wairau Stream
for Oakura water supply purposes at or about GR:
P19:933-297

Expiry Date: 1 June 2013

Review Date(s): June 2004, June 2007, June 2008, June 2009

Site Location: Upper Wairau Road, Oakura

Legal Description: Pt Subn 2 of Sec 170 Oakura Dist Blk III Cape SD

Catchment: Timaru

Tributary: Wairau

Consent 5713-1

General conditions

- a) That on receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) That unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) That the consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall construct the weir, including the fish pass, in general accordance with Plan No W-DFC-1001 submitted with application 1174.
2. The consent holder shall notify the Taranaki Regional Council, at least 48 hours prior to the construction of the fish pass and any maintenance works which would involve disturbance of, or deposition to the streambed or discharges to water.
3. The structure authorised by this consent shall be maintained to ensure the conditions of this consent are met.
4. The consent holder shall ensure that the intake is appropriately screened to avoid the entrapment of native fish.
5. That any works or structures which are the subject of this consent shall not obstruct native fish passage.
6. The consent holder, during fish pass construction and weir maintenance, shall adopt the best practicable option to avoid or minimise the discharge of silt or other contaminants into water or onto the streambed and to avoid or minimise any adverse effects on water quality.
7. The structure authorised by this consent shall be removed and the area reinstated, if and when the structure is no longer required. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to the removal of the structure and reinstatement of the area.
8. That the fishpass shall be installed only between 1 November and 30 April.

Consent 5713-1

9. The Taranaki Regional Council may review, under section 128 of the Resource Management Act 1991, any or all of the conditions of this consent by giving notice of review during the month of June 2004, June 2007, June 2008 and/or June 2009, for the purpose of ensuring that the conditions are adequate to deal with any significant adverse effects on the environment arising from the exercise of this consent, which either were 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 13 June 2001

For and on behalf of
Taranaki Regional Council

Chief Executive

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 19 March 2003

Conditions of Consent

Consent Granted: To take and use groundwater from two bores for Oakura
water supply purposes at or about GR: P19:932-300 and
GR: P19:934-301

Expiry Date: 1 June 2020

Review Date(s): June 2008, June 2014

Site Location: Wairau Road, Oakura

Legal Description: Lot 1 DP 312138 & Lot 1 DP 19978 Blk II Wairau SD

Catchment: Oakura

Tributary: Wakamure

Consent 6114-1

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The exercise of this consent shall be undertaken in general accordance with the information submitted in support of the application and to ensure the conditions of this consent are met at all times.
2. The consent holder shall at all times adopt the best practicable option, as defined by section 2 of the Resource Management Act 1991, to prevent or minimise any actual or likely adverse effect on the environment associated with the abstraction of groundwater, including but not limited to the efficient and conservative use of water.
3. The volume of water abstracted shall not exceed 3715 cubic metres/day at an individual bore rate of 35 litres/second, or a combined rate of 43 litres/second between the two bores.
4. The abstraction shall be managed such that there are no adverse effects on other known groundwater and surface water takes from the exercise of this consent.
5. The consent holder shall operate a measuring device capable of recording daily rates of abstraction from the bore[s] and monitor water levels in nearby observation bores, and shall make these records available to the Chief Executive upon request.
6. 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 2008 and/or June 2014, 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 19 March 2003

For and on behalf of
Taranaki Regional Council

Chief Executive

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
New Plymouth 4342

Decision Date 27 November 2019

Commencement Date 27 November 2019

Conditions of Consent

Consent Granted: To dam water and use an existing weir in the Mangatete
Stream for water supply purposes and to undertake
maintenance on the weir

Expiry Date: 1 June 2037

Review Date(s): June 2021, June 2024, June 2027,
June 2030, June 2033, June 2036

Site Location: Saunders Road, Okato

Grid Reference (NZTM) 1678238E-5658247N

Catchment: Kaihihi

Tributary: Mangatete

*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. This consent authorises the use of a weir existing at the time of this consent being granted along with the maintenance in general accordance with the details provided with the application for this consent. If there is any conflict between the documentation submitted in support of the application and the conditions of this consent, the conditions of this consent shall prevail.
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 restrict the passage of fish.
4. The maintenance works shall not restrict the passage of fish.
5. The maintenance work shall be completed before 1 May 2020.
6. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to and upon completion of the weir maintenance works. Unless the Chief Executive advises that an alternative electronic method is required this notice shall be served by completing and submitting the 'Notification of work' form on the Council's website (<https://onlineservices.trc.govt.nz/online-services/new/worknotification-online-form/step/1>).
7. The consent holder shall ensure that the area and volume of riverbed disturbance during maintenance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as is practicable, be reinstated.
8. The consent holder shall take all reasonable steps during maintenance to:
 - a. minimise the amount of sediment discharged to the stream;
 - b. minimise the amount of sediment that becomes suspended in the stream; and
 - c. mitigate the effects of any sediment in the stream.

Consent 4805-3.0

9. 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 2021 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 27 November 2019

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH 4342

Decision Date: 21 June 2013

Commencement Date: 21 June 2013

Conditions of Consent

Consent Granted: To take and use water from the Waiongana Stream to
supply water for industry in Waitara

Expiry Date: 1 June 2031

Review Date(s): June 2018, June 2024, June 2030

Site Location: Mountain Road, Lepperton

Legal Description: Adjacent to Pt Sec 190 (Site of take)

Grid Reference (NZTM) 1704217E-5672857N

Catchment: Waiongana

*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 to section 36 of the Resource Management Act 1991.

Special conditions

1. The rate of taking shall not exceed 58 litres per second.
2. The consent holder shall notify the Chief Executive, Taranaki Regional Council of the intention to exercise this consent at least 60 days before the consent is first exercised. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz.
3. Before exercising this consent the consent holder shall install, and thereafter maintain a water meter and a datalogger at the site of taking. The water meter and datalogger shall be tamper-proof and shall measure and record the rate and volume of water taken to an accuracy of $\pm 5\%$. Records of the date, the time and the rate and volume of water taken at intervals not exceeding 15 minutes, shall be made available to the Chief Executive, Taranaki Regional Council at all reasonable times/ on an annual basis.

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 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 and/or maintained in accordance with the manufacturer's specifications; and/or
 - (b) 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.
5. 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.

Consent 0126-5

6. The water meter and datalogger shall be accessible to Taranaki Regional Council officer's at all reasonable times for inspection and/or data retrieval.
7. 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.
8. When the flow in the Waiongana Stream is less than 471 litres per second as measured at State Highway 3A, 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).
9. The taking of water authorised by this consent shall be managed to ensure that the flow in the Waiongana Stream as measured at State Highway 3A is not less than 402 litres per second. No taking shall occur when the flow is less than 402 litres per second.
10. 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 from the Waiongana Stream, including, but not limited to, the efficient and conservative use of water.
11. The consent holder shall ensure that the intake is screened to avoid fish (in all stages of their life-cycle) entering the intake or being trapped against the screen.
12. During any 12-month period ending on 30 June in which this consent is exercised, the consent holder shall make a payment of \$2000 (plus GST) to the Taranaki Regional Council as a financial contribution. The financial contribution shall be used to remedy or mitigate adverse environmental effects of the taking in the Waiongana Stream catchment. The financial contribution shall be adjusted in accordance with the Consumer Price Index (or similar) so that the real value of the payment remains the same.
13. The consent holder shall provide reports to the Chief Executive, Taranaki Regional Council to demonstrate that the amount authorised for taking, or some lesser amount, is reasonably needed. These reports shall be provided no later than 30 April 2018, 30 April 2024, and 30 April 2030.
14. This consent shall lapse on in 1 June 2031, unless the consent is given effect to before the end of that period or the Taranaki Regional Council fixes a longer period pursuant to section 125(1)(b) of the Resource Management Act 1991.

Consent 0126-5

15. 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 2018 and/or June 2024 and/or June 2030, for the purposes of:
- (a) reducing the amount of water authorised to be taken following a review of requirements provided in accordance with condition 13;
 - (b) 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; and/or
 - (c) to require any data collected in accordance with the conditions of this consent to be transmitted directly to the Council's computer system, in a format suitable for providing a 'real time' record over the internet.

Signed at Stratford on 21 June 2013

For and on behalf of
Taranaki Regional Council

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
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 16 June 2003

Conditions of Consent

Consent Granted: To use and maintain an existing weir, fish pass and
associated intake structures on the Waiongana Stream for
Waitara Industrial water supply purposes at or about GR:
Q19:143-344

Expiry Date: 1 June 2020

Review Date(s): June 2008, June 2014

Site Location: Mountain Road, Lepperton

Legal Description: Pt Secs 190 & 191 Blk XI Paritutu SD

Catchment: Waiongana

Consent 4816-2

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall notify the Chief Executive, Taranaki Regional Council, at least 48 hours prior to any maintenance works of the structure[s] or fish pass licensed by this consent which would involve disturbance of, or deposition to, the streambed or discharges to water.
2. The consent holder, during any maintenance works, shall adopt the best practicable option to avoid or minimise the discharge of silt or other contaminants into water or onto the streambed and to avoid or minimise the disturbance of the streambed and any adverse effects on water quality.
3. The consent holder, during any maintenance, shall ensure that the area and volume of river bed disturbance shall, so far as practicable, be minimised and any areas which are disturbed shall, so far as practicable, be reinstated.
4. No maintenance work shall be conducted during the period 1 May to 31 October unless waived in writing by the Chief Executive, Taranaki Regional Council
5. The structure[s] authorised by this consent shall be maintained to ensure the conditions of this consent are met.
6. The structure[s] authorised by this consent shall be constructed and maintained so as not to restrict the passage of native fish and trout, to the satisfaction of the Chief Executive, Taranaki Regional Council.
7. The structure[s] authorised by this consent shall be removed and the area reinstated, if and when the structure is no longer required. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to the removal of the structures and reinstatement of the area.

Consent 4816-2

8. 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 2008 and/or June 2014, 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 16 June 2003

For and on behalf of
Taranaki Regional Council

Chief Executive

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

Name of
Consent Holder: New Plymouth District Council
Private Bag 2025
NEW PLYMOUTH

Consent Granted
Date: 9 April 2002

Conditions of Consent

Consent Granted: To modify and maintain an existing earth retention
structure (dam) on the Kakapo Stream at or about GR:
Q19:303-429

Expiry Date: 1 June 2021

Review Date(s): June 2009, June 2015

Site Location: Kaipikari Road, Urenui

Legal Description: Lots 1 & 2 DP 12063 Urenui Dist

Catchment: Onaero

Tributary: Kakapo

Consent 5989-1

General conditions

- a) On receipt of a requirement from the Chief Executive, Taranaki Regional Council (hereinafter the Chief Executive), the consent holder shall, within the time specified in the requirement, supply the information required relating to the exercise of this consent.
- b) Unless it is otherwise specified in the conditions of this consent, compliance with any monitoring requirement imposed by this consent must be at the consent holder's own expense.
- c) The consent holder shall pay to the Council all required administrative charges fixed by the Council pursuant to section 36 in relation to:
 - i) the administration, monitoring and supervision of this consent; and
 - ii) charges authorised by regulations.

Special conditions

1. The consent holder shall notify the Chief Executive, Taranaki Regional Council, at least 48 hours prior to any maintenance works of the structure[s] or fish pass licensed by this consent which would involve disturbance of, or deposition to, the streambed or discharges to water.
2. Any works or structure[s] which are the subject of this consent shall not obstruct fish passage after 1 December 2003.
3. The consent holder, during fish pass construction and any structure maintenance, shall adopt the best practicable option to avoid or minimise the discharge of silt or other contaminants into water or onto the streambed and to avoid or minimise the disturbance of the streambed and any adverse effects on water quality.
4. The consent holder, during fish pass construction and any structure maintenance shall ensure that the area and volume of river bed disturbance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as is practicable, be reinstated.
5. The structure[s] authorised by this consent shall be maintained to ensure the conditions of this consent are met.
6. The structure[s] authorised by this consent shall be removed and the area reinstated, if and when the structure is no longer required. The consent holder shall notify the Taranaki Regional Council at least 48 hours prior to the removal of the structures and reinstatement of the area.
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 2009 and/or June 2015, 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 9 April 2002

For and on behalf of
Taranaki Regional Council

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 actual or likely effects on the receiving environment from the activities during the monitoring year. Administrative performance is concerned with the Company's approach to demonstrating consent compliance in site operations and management 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 and 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.