New Plymouth District Council Water Supplies

Monitoring Programme Annual Report 2020-2021

Technical Report 2021-18





Working with people | caring for Taranaki

Taranaki Regional Council Private Bag 713 Stratford

ISSN: 1178-1467 (Online) Document: 2861284 (Word) Document: 2953111 (Pdf) March 2022

New Plymouth District Council Water Supplies

Monitoring Programme Annual Report 2020-2021

Technical Report 2021-18

New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2020-2021

Technical Report 2021-18

Taranaki Regional Council Private Bag 713 Stratford

ISSN: 1178-1467 (Online) Document: 2861284 (Word) Document: 2953111 (Pdf) March 2022

Executive summary

New Plymouth District Council (NPDC) operates five water supply schemes in the New Plymouth District. This report for the period July 2020 to June 2021 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, New Plymouth District Council demonstrated an overall high level of environmental performance.

NPDC holds 16 resource consents relating to those water supply systems, which included a total of 138 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, five 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, one sample collected for water quality analysis, two fish surveys, 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.

NPDC provided all the abstraction data required under consent conditions and this showed that daily volume limits and instantaneous abstraction rates were complied with for the majority of the monitoring period. Self-monitoring of the Inglewood discharge showed that the discharge generally complied with consent conditions.

During the year, NPDC demonstrated a high level of environmental and administrative performance with the resource consents.

For reference, in the 2020-2021 year, consent holders were found to achieve a high level of environmental performance and compliance for 86% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 11% of the consents, a good level of environmental performance and compliance was achieved.

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

This report includes recommendations for the 2021-2022 year, including a recommendation relating to an optional review of consent 0026-4 in June 2022.

Table of contents

				Page
1		Introductio	on	4
	1.1	Complia	nce monitoring programme reports and the Resource Management Act 1991	4
		1.1.1	Introduction	4
		1.1.2	Structure of this report	4
		1.1.3	The Resource Management Act 1991 and monitoring	4
		1.1.4	Evaluation of environmental and administrative performance	5
	1.2	Process	description	6
	1.3	Resource	e consents	6
	1.4	Monitor	ing programme	11
		1.4.1	Introduction	11
		1.4.2	Programme liaison and management	11
		1.4.3	Site inspections	11
		1.4.4	Discharge and water quality sampling	11
		1.4.5	Review of supplied flow and discharge data	11
		1.4.6	Fish survey	11
2		Results		12
	2.1	Inspectio	ons	12
		2.1.1	New Plymouth	12
		2.1.2	Okato	12
		2.1.3	Oakura	13
		2.1.4	Waitara industrial intake weir (contingency take site)	13
		2.1.5	Inglewood	13
	2.2	Discharg	ge and receiving water monitoring	14
		2.2.1	Inglewood WTP discharge monitoring	14
		2.2.2	New Plymouth WTP discharge	14
	2.3	Abstract	ion and stream flow data	15
		2.3.1	Abstraction data	15
		2.3.2	Stream flow data	15
	2.4	Fish surv	/eys	16
		2.4.1	Ngatoro Stream (Inglewood water supply)	16
		2.4.2	Mangatete Stream (Okato water supply)	17
	2.5	Incident	s, investigations, and interventions	18

i

3		Discussion		19
	3.1	Discussio	on of site performance	19
	3.2	Environm	nental effects of exercise of consents	19
	3.3	Evaluatio	on of performance	19
		3.3.1	New Plymouth WTP	19
		3.3.2	Inglewood WTP	22
		3.3.3	Oakura WTP	24
		3.3.4	Okato WTP	26
		3.3.5	Urenui dam	28
		3.3.6	Waitara industrial supply	28
	3.4	Recomm	endations from the 2019-2020 Annual Report	30
	3.5	Alteratio	ns to monitoring programmes for 2021-2022	30
	3.6	Exercise	of optional review of consent	31
4		Recommer	ndations	32
Glossa	ary of c	ommon terr	ms and abbreviations	33
Biblio	graphy	and referen	nces	35

Appendix I Resource consents held by NPDC

List of tables

Table 1	Summary of resource consent and processes	7
Table 2	NPDC Inglewood backwash self-monitoring	14
Table 3	Results of NPWTP stormwater sampling 18 May 2021	14
Table 4	Summary of compliance with abstraction data requirements and abstraction limits	15
Table 5	Summary of performance for Consent 0672-3	19
Table 6	Summary of performance for Consent 0673-3	20
Table 7	Summary of performance for Consent 2055-3	20
Table 8	Summary of performance for Consent 6643-1	21
Table 9	Summary of performance for Consent 3934-3	22
Table 10	Summary of performance for Consent 4509-2	22
Table 11	Summary of performance for Consent 4510-2	23
Table 12	Summary of performance for Consent 5869-1	24
Table 13	Summary of performance for Consent 1277-3	24
Table 14	Summary of performance for Consent 1278-4	25
Table 15	Summary of performance for Consent 5713-2	25

Table 16	Summary of performance for Consent 6114-1	26
Table 17	Summary of performance for Consent 0026-3	26
Table 18	Summary of performance for Consent 5989-1	28
Table 19	Summary of performance for Consent 0126-5	28
Table 20	Summary of performance for Consent 4816-2	29

List of figures

Figure 1	Location of New Plymouth District Council water supply plants and structures	10
Figure 2	Residual flow in the Mangatete Stream during the dry season	16

List of photos

Photo 1	Okato water supply intake weir in the Mangatete Stream	12
Photo 2	Inglewood contingency/farm supply intake and weir in the Ngatoro Stream	13
Photo 3	Ngatoro Stream weir and fish pass	17

1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is the Annual Report for the period July 2020 to June 2021 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 23rd 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 though 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 2021-2022 monitoring year.

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

1.1.3 The Resource Management Act 1991 and monitoring

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

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

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' in as much as is appropriate for each 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 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 NPDC, this report also assigns them a rating for their environmental and administrative performance during the period under review.

Environmental performance is concerned with <u>actual or likely effects</u> on the receiving environment from the activities during the monitoring year. Administrative performance is concerned with NPDC'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 <u>and</u> unforeseeable (that is a defence under the provisions of the RMA can be established) may be excluded with regard to the performance rating applied. For example loss of data due to a flood destroying deployed field equipment.

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

Environmental Performance

- **High:** No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving environmental impacts and was not obliged to issue any abatement notices or infringement notices in relation to such impacts.
- **Good:** Likely or actual adverse effects of activities on the receiving environment were negligible or minor at most. There were some such issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party but these items were not critical, and follow-up inspections showed they have been dealt with. These minor issues were resolved positively, co-operatively, and quickly. The Council was not obliged to issue any abatement notices or infringement notices in relation to the minor non-compliant effects; however abatement notices may have been issued to mitigate an identified potential for an environmental effect to occur.

For example:

- High suspended solid values recorded in discharge samples, however the discharge was to land or to receiving waters that were in high flow at the time;
- Strong odour beyond boundary but no residential properties or other recipient nearby.
- **Improvement required**: Likely or actual adverse effects of activities on the receiving environment were more than minor, but not substantial. There were some issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative

adverse effects of a persistent minor non-compliant activity could elevate a minor issue to this level. Abatement notices and infringement notices may have been issued in respect of effects.

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

Administrative performance

- **High:** The administrative requirements of the resource consents were met, or any failure to do this had trivial consequences and were addressed promptly and co-operatively.
- **Good:** Perhaps some administrative requirements of the resource consents were not met at a particular time, however this was addressed without repeated interventions from the Council staff. Alternatively adequate reason was provided for matters such as the no or late provision of information, interpretation of 'best practical option' for avoiding potential effects, etc.
- **Improvement required:** Repeated interventions to meet the administrative requirements of the resource consents were made by Council staff. These matters took some time to resolve, or remained unresolved at the end of the period under review. The Council may have issued an abatement notice to attain compliance.
- **Poor:** Material failings to meet the administrative requirements of the resource consents. Significant intervention by the Council was required. Typically there were grounds for an infringement notice.

For reference, in the 2020-2021 year, consent holders were found to achieve a high level of environmental performance and compliance for 86% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 11% 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 16 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 17 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	
	0672 - Discharge	-	2026	To discharge wastewater from a WTP into an unnamed tributary of the Mangorei Stream	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 Trust Power Ltd-Taranaki	
New	0673 - Discharge	-	2026	To discharge stormwater from a WTP into an unnamed tributary of the Mangorei Stream	Generation and monitoring of this is included in the Mangamahoe Power Scheme monitoring programme.	
Plymouth	2055 - Take	-	2021	Take up to 60,480 m ³ /day, at a maximum rate of 740 L/s, from Lake Mangamahoe	Two intakes in Lake Mangamahoe supply the NPWTP. Flocculent is added and water passes through clarifiers then sand filters. Water is disinfected (chlorine gas) and pH buffered (lime).	
	6643 - Land use	-	2020*	To erect, place and maintain a weir in the Mangorei Stream	Clarifier bleed and filter backwash is discharged to settling ponds in front of plant. Supernatant is returned to the treatment plant. Accumulated sludge is periodically discharged to land.	
	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 the bed of the Ngatoro Stream located near Dud Road, approximately 4.5 km south west of Inglewood. There is also a contingency take via a	
Inglewood	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	weir (with a fish pass) located approximately 3 km further upstream near the end of Dudley Road. Flocculent is added to the raw water which is then passed through clarifiers and sand filters. The wate is pH buffered (lime) and disinfected (chlorine gas A new 4,500 m ³ reservoir was commissioned in Jul 2003.	
	4510 - Take	-	2021	To take up to 4,850 m ³ /day at 56 L/s from the Ngatoro Stream		

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process	
	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	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.	
	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 is taken from a secure bore. The water is treated with sodium hypochlorite	
Oakura	1278 - Take	2025	2031	Take and use water from the Wairau Stream for Oakura water supply purposes	followed by lime injection for pH adjustment. Previously water was taken from weir (with a fish	
	5713 - Land use	2025	2031	To use a weir to dam the Wairau Stream for Oakura water supply purposes	pass) in the Wairau Stream and disinfected with chlorine gas. The surface water take and backwash discharge consents have been retained for	
	6114 – Take	_	2020*	To take and use groundwater from two bores for Oakura water supply purposes	contingency purposes.	
Okato	0026 - Take	2022	2037	To take water from the Mangatete Stream for public water supply purposes	Water is taken from infiltration gallery and weir (with fish pass) on Mangatete Stream. Passed through cartridge filters (no flocculent or backwashing), pH buffered (lime) and disinfected (chlorine gas).	

Water Supply Scheme	Resource consent	Next Review	Expires	Activity	Process
Waitara Industrial	0126 - Take	2024	2031	To take and use water from the Waiongana Stream to supply water for industry in Waitara	This supply is not currently used and has been retained for contingency purposes. Raw water is diverted from the Waiongana Stream via a weir (with a fish pass) near Mountain Road,
	4816 - Land use	-	2020*	To use and maintain an existing weir, fish pass and associated intake structures on the Waiongana Stream	approximately 9 km south of Waitara. Water is gravity fed through a settling pond system to a reservoir. There is no chemical treatment of water.
Urenui	5989 - Land Use	-	2021	To modify and maintain an existing earth retention structure (dam) on the Kakapo Stream	Treatment plant decommissioned and removed, now supplied from the New Plymouth WTP. The weir has a fish pass.

* Consent is in the process of being renewed

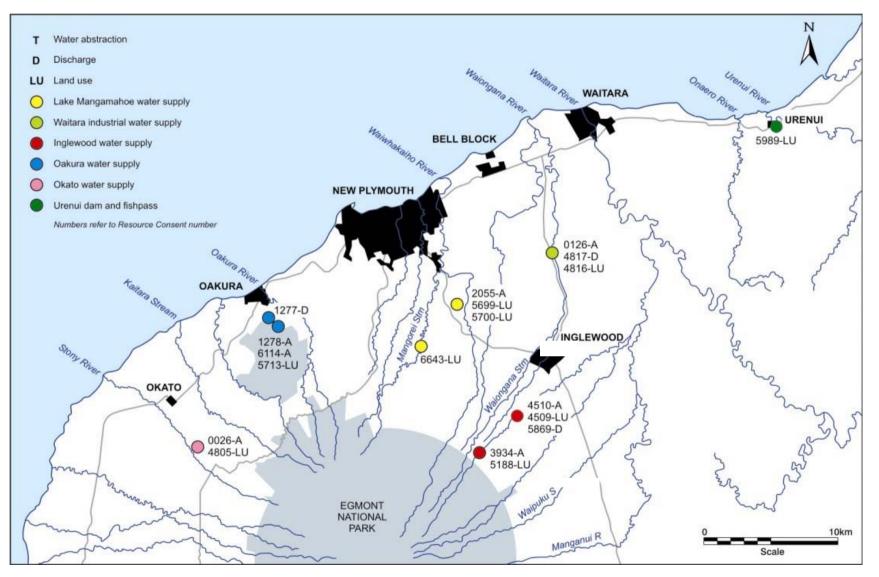


Figure 1 Location of New Plymouth District Council water supply plants and structures

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 New Plymouth water treatment plant (NPWTP).

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, fish surveys were undertaken in the Mangatete and Ngatoto Streams.

2 Results

2.1 Inspections

An annual inspection of NPDC's water treatment activities was undertaken on 11 March 2021. The inspections focussed on instream structures, discharges, and water abstraction measuring equipment.

2.1.1 New Plymouth

The flow in the Mangorei weir was quite high with water flowing down the fish pass and across the entire structure. A tree that had previously been blocking the fish pass had been removed. The intakes at Lake Mangamahoe were inspected. A dead fish was found by the step screen by the northern intake. Abstraction of 1,508 m³/hr matched telemetered data and complied with consent conditions.

2.1.2 Okato

The flow in Mangatete Stream was high and the stream was brown in colour after heavy overnight rain. The fish pass was well covered in water and there was a lot of water passing over the weir. The staff gauge reading and rate of take data were consistent with telemetered data received at the time. Water conservation measures were in place.



Photo 1 Okato water supply intake weir in the Mangatete Stream

2.1.3 Oakura

The weir on the Wairau Stream was checked. Flow was moderate and there was adequate flow down the fish pass. Water was being taken from Bore 100 with 38.5 m^3 /hr consistent with telemetered data of around 10 L/s, this was in compliance with consent conditions. The new Bore 250 was not in operation. New buildings were being constructed at the main site.

2.1.4 Waitara industrial intake weir (contingency take site)

The system is no longer used. The flow in the Waiongana was moderate to high and there was adequate flow down the fish pass. The weir and fish pass were in good condition and NPDC advised that some rocks on the fish pass were to be replaced during lower flows. The intake pipes have been sealed with concrete but the flow meter was still recording 5 m³/hr. NPDC can't establish the reason for this. There was a trickle of overflow from the settling ponds.

2.1.5 Inglewood

The contingency/farm supply at the top of Dudley Road was inspected with no issues noted. The Ngatoro Stream had a moderate to high flow and was fairly clear. Flow was fairly high and quite brown in colour at the main intake further downstream. NPDC advised that there had been some issues with the infiltration gallery and that this may require excavation for inspection. There have also been issues with water quality at the site that required further investigation. The intake flow rate of 80 m³/hr was in compliance with consent conditions and matched telemetered data.



Photo 2 Inglewood contingency/farm supply intake and weir in the Ngatoro Stream

2.2 Discharge and receiving water monitoring

2.2.1 Inglewood WTP discharge monitoring

NPDC undertook self-monitoring of the backwash discharge at the Inglewood WTP. The results are given in Table 2. The majority of the results complied with consent limits, with the exception of one minor non-compliance with the level of suspended solids.

Date	Suspended solids g/m ³	рН	Free available chlorine g/m³	Turbidity NTU
10-Jul-20	29	7.2	0.02	5.6
13-Jul-20	17	7.3	0.05	3.4
26-Aug-20	11	6.8	0.02	3.3
2-Sep-20	4	7.0	0.00	1.2
9-Sep-20	6	7.3	0.02	2.1
16-Sep-20	6	7.5	0.00	3.9
8-Dec-20	6	7.1	0.04	1.7
4-Feb-21	5	7.4	0.04	3.0
29-Apr-21	6	7.5	0.01	3.0
11-May-21	10	6.9	0.00	4.8
3-Jun-21	3	7.2	0.01	1.8
Consent limits	20	6-9	0.1	-

Table 2 NPDC Inglewood backwash self-monitoring

2.2.2 New Plymouth WTP discharge

Typically the New Plymouth Water Treatment Plant (NPWTP) backwash ponds do not discharge as they recirculate water back into the treatment plant. Occasionally NPDC will start discharging to minimise algal growth in the pond system.

A stormwater discharge sample was taken from the NPWTP and these results are given in Table 3.

Table 3 Results of NPWTP stormwater sampling 18 May 2021

Parameter	Unit	Result	Consent limit
Chlorine	g/m³	-	0.1
рН	-	6.6	6.0-9.0
Suspended solids	g/m³	17	100
Temperature	°C	13.8	-

The results complied with consented limits.

2.3 Abstraction and stream flow data

2.3.1 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 4.

Records supplied Compliance Compliance Completeness Site on time? daily volumes abstraction rate of data New Plymouth Yes 100% 100% 100% Inglewood - main take Yes 100% 100% 100% Inglewood - farmer and Yes 99% 99% 100% backwash take Oakura (groundwater) Yes 100% 100% 100% Okato Yes 100% 100 % 100%

 Table 4
 Summary of compliance with abstraction data requirements and abstraction limits

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

There were no abstractions from the Waiongana Stream in relation to the Waitara industrial supply during the 2020-2021 monitoring period (used for contingency only).

2.3.2 Stream flow data

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

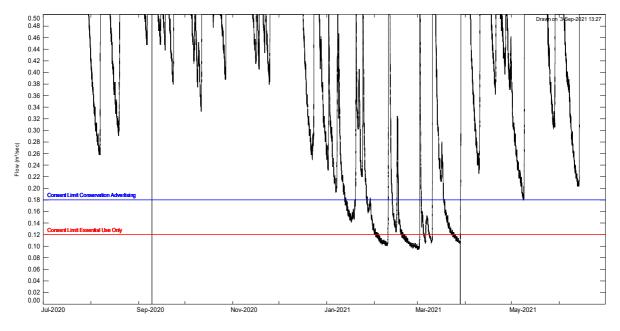
When the mean daily flow in the Mangatete Stream at the Saunders Road bridge is less than 120 L/s for a period of seven or more consecutive days, the consent holder shall enforce 'level 2' water restrictions. These restrictions may only be lifted when the mean daily flow is greater than 120 L/s for a 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 calculate the stream flow. In addition, the Council conducts three gaugings per year to maintain a rating curve.

During the 2020-2021 monitoring period Level 1 restrictions were required to be implemented as per consent 0026-4 for a few days on two occasions in February 2021, while Level 2 restrictions were required

for a few days in late February and early March 2021 (Figure 2, note: restrictions are not required until the flow has been below the relevant level for seven consecutive days, so even though the flow may be below the level 1 or level 2 line on the graph restrictions are only required if it is below for seven or more days).

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 2 Residual flow in the Mangatete Stream during the dry season

2.4 Fish surveys

During the period under review fish surveys were undertaken in the Mangatete Stream (in relation to the Okato water supply) and the Ngatoro Stream (Inglewood water supply).

2.4.1 Ngatoro Stream (Inglewood water supply)

A spotlighting survey was performed on 25 January 2021 in the Ngatoro Stream at two sites, upstream and downstream of the Inglewood contingency and farm water supply weir (Photo 3). The weir fish pass and directly below the weir was also surveyed. In-stream habitat was relatively similar between sites, the major difference being a more gravel recorded up stream compared to downstream.

Fish diversity and abundance were similar at both sites. Freshwater crayfish were recorded for the first time in the current survey, but this may be due to this species not being recorded in previous sampling methods. Koaro were absent from the current and previous 2017 survey, while being historically present at both sites. The absence of koaro may be due to barriers to fish passage downstream of the weir, or a lack of recruitment to the stream in general.

This survey confirms that the Inglewood contingency and farm water supply weir in the Ngatoro Stream does not form a significant barrier to the passage of fish that are able to migrate to this point in the stream. Provided that regular inspections of the weir confirm that it is being maintained as required, it is recommended that fish monitoring be maintained at the current level of once every three years, using the spotlighting methodology.



Photo 3 Ngatoro Stream weir and fish pass

2.4.2 Mangatete Stream (Okato water supply)

On 2 and 3 February 2021, three sites were surveyed for freshwater fish in the Mangatete Stream, in relation to the water intake weir and fish pass associated with the Okato water supply. Site 1 was located approximately 100m upstream of the weir, while site 2 was located approximately 150 m downstream of the intake. A third, SEM site, was also surveyed, located approximately four kilometres upstream of the weir. The electric fishing survey method was used at sites 1 and 2, with the spotlighting method being used at the SEM site. The purpose of the surveys was to assess the weir in terms of fish passage. This weir is not to restrict fish passage, in order to meet the permitted activity rule for existing structures (rule 52 in the Regional Freshwater Plan for Taranaki).

Of the three sites, two have been routinely monitored in relation to this weir (immediately upstream and downstream of the weir). The third site has been added more recently as a part of the implemented State of the Environment monitoring programme for freshwater fish, and is located just upstream of Carrington Road.

A moderate species richness was recorded during the survey, with four species recorded in total, including longfin eel, redfin bully, koura, and shortjaw kokopu. The absence of torrentfish in the Mangatete Stream is unusual, and may indicate the presence of a barrier to fish passage further downstream. Short-jaw kokopu were recorded at the most upstream site, which is a significant result.

Species richness and abundance was higher upstream than downstream, although this difference is not significant, and considered to be a reflection of differences in habitat between the sites. There was no indication that the weir is a barrier to the fish species recorded within its vicinity. The survey, and previous surveys undertaken by the Council, coupled with work undertaken by the Department of Conservation in the

headwaters of the Mangatete Stream, indicate that the weir is not a barrier to the passage of longfin eel, redfin bully, banded kokopu, giant kokopu or short-jaw kokopu. A visual inspection of the fish pass indicated that it is too shallow to provide passage of trout, although it is likely that adult trout will be able to jump over the weir itself, especially in the higher flows that usually initiate trout migration.

With regard to whether the weir meets the fish passage condition of permitted activity rule 52 of the Regional Freshwater Plan for Taranaki, it appears that there is no restriction of fish passage. Therefore it is considered that the weir meets this condition. However, it may be worthwhile for NPDC to hold a consent for this weir, as this would provide a greater degree of flexibility for management, for example when planning maintenance works.

Copies of the full reports are available from the Council upon request.

2.5 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 2020-2021 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 plants were well run and organised. Abstraction data was provided to Council in a timely manner and the majority of abstraction volumes and rates were in compliance with consent conditions.

Self-monitoring the Inglewood backwash found the majority of results to be in compliance with consent limits, with one suspended solids result slightly over. Suspended solid levels have been occasionally exceeded in past monitoring years and measures implemented by NPDC in the 2020-2021 year to prevent this appear to have been successful.

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.

Fish surveys undertaken in the Mangatete Stream (in relation to the Okato water supply) and the Ngatoro Stream (Inglewood water supply) indicated that the presence of the weirs was unlikely to be having any significant adverse effects on fish passage.

There was one occasion where suspended solids in the backwash discharge was not in compliance, however the exceedance was less than minor and unlikely to have an adverse effect on the Ngatoro Stream.

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 5-20.

3.3.1 New Plymouth WTP

Table 5 Summary of performance for Consent 0672-3

	Purpose: To discharge wastewater 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 information submitted in support of application	Inspection and liaison with consent holder	Yes			
3.	Limits not to be exceeded in the discharge	Self-sampling by NPDC when required	Yes			
4.	Discharge not to cause certain effects in the receiving waters	Inspection	Yes			
5.	Lapse provision	N/A	N/A			
6.	Optional review provision re environmental effects	No further provision for review prior to expiry	N/A			

Purpose: To discharge wastewater 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 comp this consent	High	
Overall assessment of administrative	performance in respect of this consent	High

N/A = not applicable

Table 6Summary of performance for Consent 0673-3

Purpose: To discharge stormwater 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 information submitted in support of application	Inspection and liaison with consent holder	Yes
3.	Catchment area not to exceed 2 ha	Inspection	Yes
4.	Requirement for a Management Plan	WTP Emergency Management Plan	Yes
5.	Requirement for a Contingency Plan	WTP Emergency Management Plan	Yes
6.	Hazardous substance storage areas to be bunded	Inspection	Yes
7.	Limits not to be exceeded 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 re environmental effects	No further provision for review prior to expiry	N/A
	erall assessment of consent compliance consent	and environmental performance in respect of	High
Ove	erall assessment of administrative perfo	prmance in respect of this consent	High

N/A = not applicable

Г

Table 7 Summary of performance for Consent 2055-3

1	Purpose: To take up to 60,480 m ³ / day at a maximum rate of 740 L/ sec of water from Lake Mangamahoe				
	Condition requirement Means of monitoring during period under review achieved				
	. Exercise of consent in accordance with information submitted in support of application	Inspection and liaison with consent holder	Yes		

Purpose: To take up to 60,480 m ³ / day at a maximum rate of 740 L/ sec of water from Lake Mangamahoe					
	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	Inspection	Yes		
4.	Recording of abstraction rates and provision of data to Council	Data forwarded to Council and reviewed	Yes		
5.	Optional review provision re environmental effects	Consent has expired	N/A		
Ov cor	High				
Ov	Overall assessment of administrative performance in respect of this consent				

N/A = not applicable

Table 8 Summary of performance for Consent 6643-1

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Adoption of best practicable option	Liaison with consent holder	Yes
2.	Consent to be exercised in line with application documentation	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 during maintenance works	No maintenance in monitoring year	N/A
7.	No maintenance to occur 1 May to 31 October unless waived by Council	No maintenance in monitoring year	N/A
8.	Lapse provision	Not applicable - consent exercised	N/A
9.	Review provision	No further option for review prior to expiry	N/A
	erall assessment of consent compliance and envirc	onmental performance in respect of this	High
Ov	erall assessment of administrative performance in	respect of this consent	High

oose: To take up to 60,480 m³/ day at a maximum rate of 740 L/ sec of water from Lake Manaamabo

N/A = not applicable

3.3.2 Inglewood WTP

Table 9Summary of performance for Consent 3934-3

Pur	pose: To take water from the Ng	atoro Stream (contingency take and farm take)	
	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Limit on abstraction from Ngatoro Stream (for contingency, gallery backwash and Dudley Road User Group).	Data received	99%
2.	Limit on the combined abstraction from Ngatoro Stream (including main abstraction from consent)	Data received	Yes
3.	Notification of use of contingency take	Liaison with consent holder	Yes
4.	Install and operate measuring device	Inspection	Yes
5.	Documentation of measuring device	NES verification in place	Yes
6.	Notification of equipment failure	Liaison with consent holder	N/A
7.	Allow 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	Yes
10.	Adopt best practice	Inspection, fish survey	Yes
11.	Review condition	No further option for review prior to expiry	N/A
	erall assessment of consent comp consent	liance and environmental performance in respect of	High
Ove	erall assessment of administrative	performance in respect of this consent	High

N/A = not applicable

Table 10 Summary of performance for Consent 4509-2

Pu	Purpose: To maintain a water supply intake infiltration gallery in and adjacent to the Ngatoro Stream					
	Condition requirement	Means of monitoring during period under review	Compliance achieved?			
1.	Any works to be undertaken only between 1 November and 30 April	Liaison with consent holder-no works undertaken during monitoring period	Yes			
2.	Notification of Council 48 hrs prior to maintenance works	Liaison with consent holder	Yes			
3.	Minimise areas of disturbance	Liaison with consent holder-no works undertaken during monitoring period	Yes			

Condition requirement Means of monitoring during period under review				
Undertake works in accordance with guidelines	Liaison with consent holder-no works undertaken during monitoring period	Yes		
Structure to be removed and area reinstated when no longer required	Not applicable-structure in use	N/A		
Structure not to restrict fish passage	Inspection	Yes		
Lapse condition	Not applicable	N/A		
Optional review provision re environmental effects	N/A			
Overall assessment of consent compliance and environmental performance in respect of this consent				
Overall assessment of administrative performance in respect of this consent High				
	Undertake works in accordance with guidelines Structure to be removed and area reinstated when no longer required Structure not to restrict fish passage Lapse condition Optional review provision re environmental effects erall assessment of consent compl consent	Undertake works in accordance with guidelinesLiaison with consent holder-no works undertaken during monitoring periodStructure to be removed and area reinstated when no longer requiredNot applicable-structure in useStructure not to restrict fish passageInspectionLapse conditionNot applicableOptional review provision re environmental effectsNo further option for review prior to expiryerall assessment of consent compliance and environmental performance in respect of consentNot applicable		

N/A = not applicable

Table 11 Summary of performance for Consent 4510-2

Pu	Purpose: To take and use water from the Ngatoro Stream				
	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	Review of abstraction data	Yes		
2.	Requirement for water meter and data logger	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.	Intake screened for fish	Inspection	Yes		
7.	Lapse condition	Not applicable	N/A		
8.	Optional review provision re environmental effects	No further option for review prior to expiry	N/A		
	erall assessment of consent compl	High			
	erall assessment of administrative	High			

N/A = not applicable

Table 12	Summary	/ of	performance	for Co	nsent 5869-1
----------	---------	------	-------------	--------	--------------

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Limit on discharge rate and duration	Data review	100%
2.	Adopt best practice	Inspection	Yes
3.	Prepare and adhere to management plan	Inspection and liaison with consent holder	Yes
4.	Limits on effects in receiving waters	Inspection	Yes
5.	Limits on certain contaminants in discharge	Consent holder monitoring	Yes. One minor exceedance in suspended solids
6.	Notification of changes at site	Inspection and liaison with consent holder	Yes
7.	Review condition	No further option for review prior to expiry	N/A
	erall assessment of consent comp s consent	liance and environmental performance in respect of	High
Ov	High		

N/A = not applicable

3.3.3 Oakura WTP

Table 13 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)

Stream (contingency)				
	Condition requirement	Means of monitoring during period under review	Compliance achieved?	
1.	Adopt best practice	Not assessed this period-consent not exercised	N/A	
2.	Consent exercised in accordance with information supplied	Not assessed this period-consent not exercised	N/A	
3.	Discharge quality	Not assessed this period-consent not exercised	N/A	
4.	Effects of discharge	Not assessed this period-consent not exercised	N/A	
5.	A review provision	No further provision for review prior to expiry	N/A	
	erall assessment of consent comp s consent	N/A		
Ov	erall assessment of administrative	N/A		

N/A = not applicable

	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.	Water meter and data logger to be installed and maintained, data to be provided to Council	No abstraction in monitoring year	N/A
4.	Maintenance of water meter and data logger	No abstraction in monitoring year	N/A
5.	Council to be notified if measuring and recording equipment breaks down	No problems during monitoring period	N/A
6.	Water meter and data logger to be accessible to Council staff	No abstraction in monitoring year	N/A
7.	Format of water records	No abstraction in monitoring year	N/A
8.	Payment of \$1,300 required when consent exercised	No abstraction in monitoring year	N/A
9.	Adopt best practicable option to prevent or minimise effects	No abstraction in monitoring year	N/A
10.	Annual report	No abstraction in monitoring year	N/A
11.	Optional review provision re environmental effects	Next option for review in June 2025	N/A
	erall assessment of consent comp	liance and environmental performance in respect of	N/A
Ove	erall assessment of administrative	performance in respect of this consent	N/A

Table 14 Summary of performance for Consent 1278-4

N/A = not applicable

Table 15 Summary of performance for Consent 5713-2

Pu	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 to be in accordance with plan submitted with the application	Inspection	Yes	
2.	Screening of intake structure to avoid entrapment of fish	Inspection	Yes	
3.	Works or structures not to obstruct native fish passage	Inspection and triennial fish survey	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?
4.	Optional review provision re environmental effects	No further option for review prior to expiry	N/A
	erall assessment of consent compliance s consent	High	
Overall assessment of administrative performance in respect of this consent		High	

N/A = not applicable

Table 16 Summary of performance for Consent 6114-1

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent to be exercised in accordance with information submitted in support of the application and to ensure consent conditions are met	Inspection and liaison with consent holder	Yes
2.	Adoption of best practicable option to prevent or minimise adverse effects on the environment	Inspection and liaison with consent holder	Yes
3.	Limits on volume and rate of abstraction	Review of abstraction data provided to Council	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	Provision of data	Yes
6.	Optional review provision re environmental effects	No further option for review prior to expiry	N/A
	Overall assessment of consent compliance and environmental performance in respect of		
Overall assessment of administrative performance in respect of this consent Hic			High

N/A = not applicable

3.3.4 Okato WTP

Table 17 Summary of performance for Consent 0026-3

Pu	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 /24 hours	Review of abstraction data received by Council	Yes	

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
2.	Rate of take may increase to 1,200 m ³ /24 hours due to emergency	Review of abstraction data provided, no excess recorded	Yes
3.	Notification of excess water take, including provision of a report with explanation	Review of abstraction data provided, no excess recorded	Yes
4.	Installation and maintenance of water measuring equipment	Inspections	Yes
5.	Certification of water measuring equipment	Verified in November 2020, next due November 2025	Yes
6.	Notification of equipment failure	Liaison with consent holder	Yes
7.	Establishment of ratings curve in Mangatete Stream	Ratings curve established	Yes
8.	Acceptable data format	Data provided	Yes
9.	Water level and abstraction data to be supplied to Council within two hours of being recorded. Verified data to be supplied annually before 1 August	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.	Adopt best practicable option	Inspection and liaison with consent holder	Yes
14.	Intake maintained to prevent entrapment of fish	Inspection	Yes
15.	Financial contribution of two annual payments of \$10,000 to be used for environmental enhancement	First contribution received	Yes
16.	Review condition	Next option for review in June 2022, recommendation attached in Section 3.6	N/A
	Overall assessment of consent compliance and environmental performance in respect of this consent		
	erall assessment of administrative perfo	prmance in respect of this consent	High

N/A = not applicable

3.3.5 Urenui dam

Table 18 Summary of performance for Consent 5989-1

Purpose: To modify and maintain an existing earth retention structure (dam) on the Kakapo Stream

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Notification of Council prior to maintenance works	Liaison with consent holder	Yes
2.	Structure not to obstruct fish passage	Not monitored during period under reivew	N/A
3.	Adopt best practicable option to avoid or minimise adverse effects on water quality	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 re environmental effects	No further option for review prior to expiry	N/A
	erall assessment of consent comp s consent	liance and environmental performance in respect of	High
Overall assessment of administrative performance in respect of this consent N/A			

N/A = not applicable

3.3.6 Waitara industrial supply

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

Table 19 Summary of performance for Consent 0126-5

Pu	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.	Data logger and water meter to be installed	To be installed before consent exercised	N/A	
4.	Document required to show data logger has been installed	To be installed before consent exercised	N/A	
5.	Council to be advised if recording equipment breaks down	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?
6.	Water meter and data logger to be accessible to Council staff	To be installed before consent exercised	N/A
7.	Records of abstraction to be provided	No abstraction in monitoring year	N/A
8.	Restrictions on abstraction due to low flow	No abstraction in monitoring year	N/A
9.	Cessation of abstraction if river flow <402 L/s	No abstraction in monitoring year	N/A
10.	Best practicable option to prevent environmental effects	Inspection	N/A
11.	Intake screened	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.	Review provision	Next option for review in June 2024	N/A
this consent			N/A N/A

N/A = not applicable

Table 20Summary of performance for Consent 4816-2

Purpose: To use and maintain an existing weir, fish pass and associated intake structures on the Waiongana Stream

	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 to avoid or minimise adverse effects	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

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
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 re environmental effects	No further option for review prior to expiry	N/A
	erall assessment of consent compliance and s consent	environmental performance in respect of	High
	erall assessment of administrative performa	nce in respect of this consent	High

Purpose: To use and maintain an existing weir, fish pass and associated intake structures on the Waiongana

N/A = not applicable

During the year under review, NPDC demonstrated a high level of environmental and administrative performance with the resource consents as defined in Section 1.1.4.

3.4 Recommendations from the 2019-2020 Annual Report

In the 2019-2020 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 2020-2021 monitoring year remain unchanged from that for 2019-2020.
- 2. THAT should there be issues with environmental or administrative performance in 2020-2021 monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
- 3. THAT the option for a review of resource consent 4509-2, in June 2021, as set out in condition 8, not be exercised, on the grounds that the current conditions are adequate to deal with any adverse effects on the environment arising from exercise of these consents.

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

3.5 Alterations to monitoring programmes for 2021-2022

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 ٠
- 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 2021-2022 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.

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 2021-2022.

3.6 Exercise of optional review of consent

Resource consent 0026-4 provides for an optional review of the consent in June 2022. Condition 16 allows the Council to review the consent, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of the consent.

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

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 2021-2022 year continue at the same level as in 2020-2021.
- 2. THAT eDNA analysis be undertaken during 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.

Glossary of common terms and abbreviations

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

The following apprent	allons 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/m³	Grams per cubic metre, and equivalent to milligrams per litre (mg/L). In water, this is also equivalent to parts per million (ppm), but the same does not apply to gaseous mixtures.
Incident	An event that is alleged or is found to have occurred that may have actual or potential environmental consequences or may involve non-compliance with a consent or rule in a regional plan. Registration of an incident by the Council does not automatically mean such an outcome had actually occurred.
Intervention	Action/s taken by Council to instruct or direct actions be taken to avoid or reduce the likelihood of an incident occurring.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
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.
рН	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	Resource Management Act 1991 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 a Science Services Manager.

Bibliography and references

- Ministry for the Environment. 2018. Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991. Wellington: Ministry for the Environment.
- Taranaki Regional Council (2021): Fish survey in the Mangatete Stream, undertaken in relation to a NPDC weir, February 2021. Internal memorandum BM004.
- Taranaki Regional Council (2021): Fish survey in the Ngatoro Stream in relation to NPDC's water take structure, January 2021. Internal memorandum BM006.
- Taranaki Regional Council (2021): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2019-2020 Technical Report 20-66.
- Taranaki Regional Council (2019): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2018-2019 Technical Report 19-33.
- Taranaki Regional Council (2018): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2017-2018 Technical Report 18-26.
- Taranaki Regional Council (2017): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2016-2017. Technical Report 17-15.
- Taranaki Regional Council (2016): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2015-2016. Technical Report 14-101.
- Taranaki Regional Council (2013): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2014-2015. Technical Report 15-61.
- Taranaki Regional Council (2014): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2013-2014. Technical Report 14-104.
- Taranaki Regional Council (2013): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2012-2013. Technical Report 13-39.
- Taranaki Regional Council (2012): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2011-2012. Technical Report 12-72.
- Taranaki Regional Council (2012): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2010-2011. Technical Report 11-22.
- Taranaki Regional Council (2011): New Plymouth District Council Water Supplies Monitoring Programme Annual Report 2009-2010. Technical Report 10-41.
- Taranaki Regional Council (2010): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2008-2009.Technical Report 09-83.
- Taranaki Regional Council (2009): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2007-2008.Technical Report 08-76.
- Taranaki Regional Council (2007): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2006-2007.Technical Report 07-24.
- Taranaki Regional Council (2006): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2005-2006.Technical Report 06-25.
- Taranaki Regional Council (2005): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2004-2005.Technical Report 05-55.

- Taranaki Regional Council (2004): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2003-2004.Technical Report 04-18.
- Taranaki Regional Council (2003): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2002-2003. Technical Report 03-80.
- Taranaki Regional Council (2002): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2001-2002. Technical Report 02-17.
- Taranaki Regional Council (2001): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 2000-2001. Technical Report 01-79.
- Taranaki Regional Council (2001): *Regional Freshwater Plan for Taranaki as adopted by the Taranaki Regional Council.* September 2001.
- Taranaki Regional Council (2000): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 1999-2000. Technical Report 00-34.
- Taranaki Regional Council (1999): New Plymouth District Council Water Supply Plants and Structures Monitoring Programme Annual Report 1998-99. Technical Report 99-54.

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.

Water Permit 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 4342	

- Decision Date 23 October 2019
- Commencement Date 14 November 2019

Consent Granted:	To take water from the Mangatete Stream for public water supply purposes
Expiry Date:	1 June 2037
Review Date(s):	June 2022 and at 3-yearly intervals thereafter
Site Location:	Okato Intake, 81 Saunders Road, Okato
Grid Reference (NZTM)	1678245E-5658219N
Catchment:	Kaihihi
Tributary:	Mangatete

General condition

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

Special conditions

- 1. Subject to condition 2, the rate of taking shall not exceed 13.8 litres per second, and the volume taken in any 24 hour period ending at midnight (New Zealand Standard Time) shall not exceed 1,000 cubic metres.
- 2. The volume taken in any 24 hour period ending at midnight (New Zealand Standard Time) may be up to 1,200 cubic metres if an emergency occurs at the plant that threatens the security of the water supply for Okato. For the purposes of this condition, an emergency situation is any event beyond the control of the consent holder which adversely impacts the consent holder's ability to provide potable water, including but not limited to: failure of critical equipment (e.g. power supply), contamination of river water, damage to infrastructure (intake structure, pipeline, treatment plant) and large fire.
- 3. If any water in excess of 1000 m³ is taken in accordance with condition 2 the consent holder shall notify the Chief Executive, Taranaki Regional Council. within 7 working days of the emergency ending and provide a report that details as a minimum:
 - a) the nature of the emergency;
 - b) the volume of water abstracted;
 - c) the minimum flow that occurred over the period of increased take; and
 - d) the water conservation measures adopted during the emergency.

A further report shall be provided within 6 months detailing any measures that can be adopted to prevent a reoccurrence.

- 4. Before exercising this consent holder shall install, and thereafter maintain water measuring equipment at the site of taking (or a nearby site in accordance with Regulation 10 of the *Resource Management (Measurement and Reporting of Water Takes) Regulations 2010.* This equipment shall be tamper-proof and record the rate and volume of water taken to an accuracy of ± 5% at intervals not exceeding 15 minutes.
- 5. The consent holder shall provide the Chief Executive, Taranaki Regional Council with a document from a suitably qualified person certifying that water measuring equipment (and equipment used for recording) required by the conditions of this consent:
 - a) have been installed and/or maintained in accordance with the manufacturer's specifications; and/or
 - b) have 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 the equipment;
- (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 and a maintenance report provided to the Chief Executive, Taranaki Regional Council within 30 days of the work occurring.
- 7. For the purposes of determining the flow in the Mangatete Stream the consent holder shall measure and record its water level at the Saunders Road bridge at intervals not exceeding 15 minutes, and establish a rating curve.
- 8. 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.
- 9. The unverified water level record and the record of water taken shall be made available to the Taranaki Regional Council within two hours of being recorded. Before 1 August each year the consent holder shall provide the Taranaki Regional Council with the verified record for the previous July to June period.
- 10. When the mean daily flow in the Mangatete Stream at the Saunders Road bridge is less than 180 litres/second 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 litres/second for a period of seven or more consecutive days. 'Level 1' restrictions include:
 - a) a total ban on using sprinklers, irrigations systems and unattended hoses; and
 - b) partial restriction of on using hand held hoses (using the odds and evens street address system).
- 11. When the mean daily flow in the Mangatete Stream at the Saunders Road bridge is less than 120 litres/second for a period of seven or more consecutive days, the consent holder shall enforce 'level 2' restrictions. These restrictions may only be lifted when the mean daily flow is greater than 120 litres/second for a period of seven or more days. 'Level 2' restrictions include a total ban on using sprinklers, irrigations systems and hand held hoses.
- 12. Before 1 December 2020 the consent holder shall provide a report to the Chief Executive, Taranaki Regional Council that:
 - a) details the effectiveness of implementing level one and level two water restrictions on water use; and
 - b) details on how the consent holder enforces level 1 and level 2 water restrictions.

The consent holder shall undertake a review of the report at three year intervals and provide the reviewed report to the Chief Executive, Taranaki Regional Council.

13. 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.

- 14. At all times the intake shall be maintained to avoid fish (including juveniles) entering the intake or being trapped.
- 15. The consent holder shall mitigate or offset the environmental effects of the taking by making two annual payments of \$10,000 (plus GST) to the Taranaki Regional Council as a financial contribution for the purpose of funding environmental enhancement projects. The environmental enhancement projects are to be in both the New Plymouth District and the rohe of Taranaki Iwi, and primarily involve reinstatement of fish passage. The first payment shall be made within 60 days of this consent commencing.
- 16. 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 2022 and at 3-yearly intervals thereafter, 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 23 October 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

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

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 <u>worknotification@trc.govt.nz</u>.
- 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.
- 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

Discharge Permit 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 4342

Consent Granted 30 May 2008 Date:

- 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

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

Consent Granted 30 May 2008 Date:

- 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

- 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:
 - 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.
- 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

Discharge Permit 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 4600

Consent Granted 11 December 2006 Date:

- 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: P19:930-301Expiry 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/m³
Free available chlorine	0.2 g/m^3
pН	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

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.

- 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

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 Cou Private Bag 2025 New Plymouth 4342	ıncil
Decision Date (Change):	22 November 2018	
Commencement Date (Change):	22 November 2018	(Granted Date: 25 June 2002)

- 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

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

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

- Decision Date: 29 February 2016
- Commencement Date: 29 February 2016

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

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 <u>worknotification@trc.govt.nz</u> 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 ± 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.

- 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

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

Consent Granted	12 June 2009
Date:	

- 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

- 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

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

Consent Granted 12 June 2009 Date:

- 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

- 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 <u>worknotification@trc.govt.nz</u> 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

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

Consent Granted 16 June 2003 Date:

- 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

- 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.

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

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

- Decision Date: 12 September 2013
- Commencement Date: 12 September 2013

Conditions of Consent

Consent Granted:	To use a weir to dam 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 structure)
- Grid Reference (NZTM) 1683254E-5667943N
- Catchment: Wairau

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 consent holder shall maintain the weir, including the fish pass, in accordance with the details provided in support of the renewal application 5844. In the case of any contradiction between the information and the conditions of this consent, the conditions of this consent shall prevail.
- 2. The consent holder shall ensure that the intake is appropriately screened to avoid the entrapment of fish.
- 3. The works or structure authorised by this consent shall not obstruct fish passage.
- 4. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2019 and/or June 2025, 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 September 2013

For and on behalf of Taranaki Regional Council

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

- Decision Date: 29 February 2016
- Commencement Date: 29 February 2016

- 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

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.

<u>Constituent</u>	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.

- 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 <u>consents@trc.govt.nz</u>.
- 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

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

Consent Granted 9 April 2002 Date:

- 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

- 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

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

Consent Granted 19 March 2003 Date:

- 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

- 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

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

Consent Granted 1 August 2005 Date:

- Consent Granted:To erect, place and maintain a weir in the Mangorei Stream
in the Waiwhakaiho catchment at or about GR: P19:044-
268Expiry Date:1 June 2020
- Review Date(s): June 2008, June 2014
- Site Location: Scout Road, Korito, New Plymouth
- Legal Description: Sec 96 Hua & Waiwakaiho Hun Blk II Egmont SD
- Catchment: Waiwhakaiho
- Tributary: Mangorei

- 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