

Stratford District Council
Water Treatment Plants
Monitoring Programme
Annual Report
2015-2016

Technical Report 2016-102

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Taranaki Regional Council
Private Bag 713
STRATFORD

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Executive summary

The Stratford District Council (SDC) operates three water treatment plants (WTP's) in the Stratford district, that supply water to Stratford, Midhirst, and Toko. This report for the period July 2015 to June 2016 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess SDC's environmental performance during the period under review, and the results and environmental effects of SDC's activities.

SDC holds 10 resource consents in relation to water supplies, which include a total of 60 conditions setting out the requirements that the consent holder must satisfy. The consent holder holds four consents to allow it to take and use water, three consents to discharge filter backwash, and three consents to construct and maintain in-stream structures.

During the monitoring period, SDC demonstrated an overall high level of environmental performance.

The Council's monitoring programme for the year under review included an annual inspection of the all of SDC's plants, weirs and discharges, a review of abstraction data, and a collection of a sample from the Stratford WTP's backwash pond.

During the monitoring period SDC upgraded its plant at the Toko WTP. This plant is now up and running providing data to the council database via telemetry. SDC also undertook works to improve the weir in the Konini Stream. There were some minor issue in regards to abstraction rates during the brief intermittent periods of low flow restrictions in the Patea River, however, no environmental effects were noted.

During the year, SDC demonstrated a high level of environmental performance. However SDC demonstrated a poor level of administrative performance due to the fact, that despite repeated reminders by Council staff, renewal applications for the weirs in the Konini Stream and Patea River, and for the backwash discharge at the Stratford WTP were submitted by SDC too late to qualify for ongoing protection of section 124 of the *Resource Management Act 1991* (RMA). As a result these consents expired during application processing and in the case of the renewal applications for the weirs in the Konini Stream and Patea River, these matters are still in the process of being resolved.

For reference, in the 2015-2016 year, 71% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 24% demonstrated a good level of environmental performance and compliance with their consents.

In terms of overall environmental and compliance performance by the consent holder over the last several years, this report shows that the SDC's performance is improving in the year under review. However of note this year was SDC's performance in regard to the administration of its regulatory obligations which was found to be poor.

This report includes recommendations for the 2016-2017 year.

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1. Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is the Annual Report for the period July 2015 to June 2016 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Stratford District Council (SDC) for its water treatment plants (WTP's). SDC operates three public WTP's servicing the Stratford, Midhirst and Toko areas.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by SDC that relate to abstractions and discharges of water, and the maintenance of in-stream structures for its water treatment plants. This is the 19th Annual Report to be prepared by the Council to cover SDC's water abstractions, discharges and their effects.

1.1.2 Structure of this report

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

- consent compliance monitoring under the RMA and the Council's obligations;
- the Council's approach to monitoring sites through annual programmes;
- the resource consents held by SDC in relation to its WTP's;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted at SDC's water treatment plants and associated structures.

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 2016-2017 monitoring year.

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

1.1.3 The Resource Management Act 1991 and monitoring

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

- (a) the neighbourhood or the wider community around an activity, and may include cultural and social-economic effects;
- (b) physical effects on the locality, including landscape, amenity and visual effects;

- (c) ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
- (d) natural and physical resources having special significance (for example recreational, cultural, or aesthetic); and
- (e) risks to the neighbourhood or environment.

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

1.1.4 Evaluation of environmental and administrative performance

Besides discussing the various details of the performance and extent of compliance by SDC during the period under review, this report also assigns them a rating for their environmental and administrative performance during the period under review.

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

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

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

Environmental Performance

- **High:** No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment. The Council did not record any verified unauthorised incidents involving significant 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 in response to unauthorised incident reports, 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 in response to unauthorised incident reports. 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 in response to unauthorised incident reports. 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 2015-2016 year, 71% of consent holders in Taranaki monitored through tailored compliance monitoring programmes achieved a high level of environmental performance and compliance with their consents, while another 24% demonstrated a good level of environmental performance and compliance with their consents.

1.2 Resource consents

SDC holds various resource consents for the water treatment plants and structures that it operates, including water abstraction permits, discharge permits and land use consents. These consents are listed in Table 1 and described in more detail in sections 1.3.1 to 1.3.3. Copies of all resource consents associated with the SDC water supply operations are attached to this report as Appendix I.

Table 1 Summary of consents held by SDC in relation to public water supplies

Water Treatment Plant	Consent No.	Purpose	Issue Date	Next Review	Expiry
Stratford	0068-3	To discharge up to 140 cubic metres/day of settled filter backwash water from the Stratford Municipal Water Treatment Plant via a settling pond into the Patea River	1998	-	2016
	0195-2	To take and use water from the Patea River for Stratford town water supply purposes	1998	-	2016
	1421-2	To take and use water from the Konini Stream a tributary of the Paetahi Stream in the Patea catchment for Stratford town water supply purposes	1998	-	2016
	2452-2	To dam the Konini Stream a tributary of the Paetahi Stream in the Patea catchment for the Stratford town water supply	1998	-	2016
	5353-1	To dam the Patea River for the Stratford town water supply	1998	-	2016
	6549-1	To repair and maintain an existing weir structure in the Konini Stream a tributary of the Paetahi Stream in the Patea catchment	2005	2016	2022
Midhirst	1276-3	To take water from the Te Popo Stream a tributary of the Manganui River in the Waitara catchment for Midhirst community public water supply purposes	2003	-	2021
	1331-3	To discharge treated filter backwash water from the Midhirst WTP into the Te Popo Stream in the Waitara catchment via a soak hole	2016	2022	2033
Toko	1337-3	To take and use groundwater from a bore in the vicinity of the Toko Stream in the Patea catchment for Toko rural water supply purposes	2005	2016	2020
	6605-1	To discharge treated filter backwash water from the Toko WTP into the Toko Stream in the Patea catchment via soak holes	2005	2016	2020

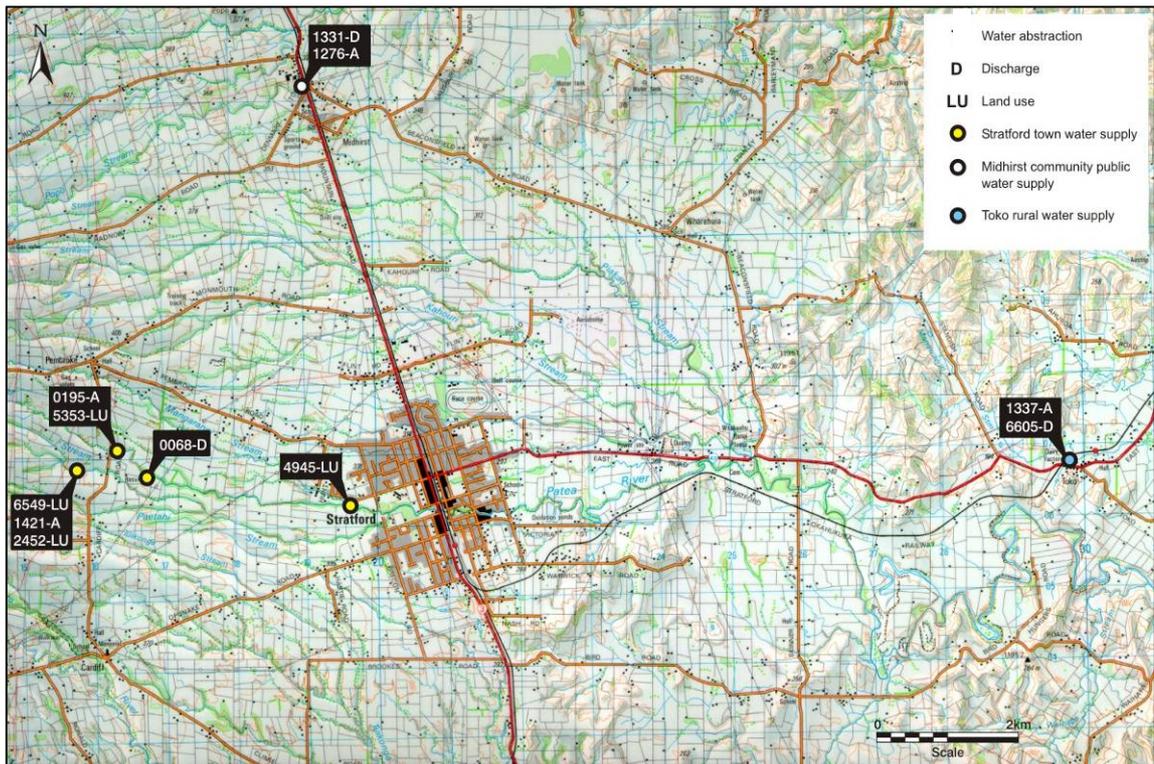


Figure 1 Location of water supply plants and structures in Stratford District

1.2.1 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 resource consent or a rule in a regional plan, or it falls within some particular categories set out in Section 14.

SDC holds water permit **1276-3** to take water from the Te Popo Stream a tributary of the Manganui River in the Waitara catchment for Midhirst community public water supply purposes. This permit was issued by the Council on 9 June 2003 under Section 87(d) of the RMA. It is due to expire on 1 June 2021.

SDC holds water permit **1337-2** to take water from a bore in the vicinity of Toko Stream in the Patea catchment for rural water supply purposes. This permit was renewed on 17 June 2005 under Section 87(d) of the RMA. It is due to expire on 1 June 2022.

SDC held water permit **0195-2** to take and use water from the Patea River for Stratford town water supply purposes. This permit was issued by the Council on 27 July 1998 and was reviewed in August 2004 to clarify abstraction rates. It expired on 1 June 2016. An application to renew this consent was received and it continues to be exercised under section 124 of the RMA.

SDC holds water permit **1421-2** to take and use water from the Konini Stream to supplement the Stratford town water supply. This permit was issued by the Council on 20 July 1998 under Section 87(d) of the RMA and was reviewed in August 2004 to clarify abstraction rates. It expired on 1 June 2016. An application to renew this consent was received and it continues to be exercised under section 124 of the RMA.

Each consent generally contains standardised conditions that;

- set abstraction rates and or volumes
- require abstractions to be measured
- require abstraction data be provided to the Council
- set specific abstraction allowances during low periods
- set out review and lapse provisions

A condition requiring a leak detection and water conservation report is included in consent 1276-3 (Te Popo stream take), and financial contributions conditions are also included in consents 1276-3 and 0195-2 (Patea River take).

1.2.2 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.

SDC holds water discharge permit **1331-3** to discharge treated filter backwash water from the Midhurst Water Treatment Plant into the Te Popo Stream in the Waitara Catchment via a soak hole. This permit was issued by the Council on 27 May 2016 under Section 87(e) of the RMA. The consent is due to expire on 1 June 2033.

SDC holds water discharge permit **0068-3** to discharge settled filter backwash water from the Stratford municipal WTP via a settling pond into the Patea River. This permit was issued by the Council on 24 February 1998 under Section 87(e) of the RMA. It expired on 1 June 2016. An application to renew this consent was received and a renewed consent was granted on 25 June 2016 (reported on in next period).

SDC holds water discharge permit **6605-1** to discharge treated filter backwash water from the Toko Water Treatment Plant into the Toko Stream in the Patea catchment via soak holes. This permit was issued by the Council on 29 April 2005 under Section 87(e) of the RMA. It is due to expire on 1 June 2022.

Each of these consents generally contain standardised conditions that;

- limit the concentration of suspended solid and/or free available chlorine
- limits the volume of the discharge (Toko and Midhurst WTP's only)
- limits the effects in receiving waters
- require the maintenance of treatment measures
- set out lapse and review conditions

1.2.3 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.

SDC holds land use consent **2452-2** to dam the Konini Stream in the Patea catchment for the Stratford town water supply. The consent was issued by the Council on 20 July 1998 under Section 87(a) of the RMA. It expired on 1 June 2016. An application to renew this consent has been received, however the dam remains unconsented as the application is processed.

SDC holds land use consent **6549-1** to repair and maintain an existing weir structure in the Konini Stream, a tributary of the Paetahi Stream in the Patea catchment. The consent was issued by the Council on 21 September 2004 under Section 87(a) of the RMA. It is due to expire on 1 July 2021.

SDC holds land use consent **5353-1** to dam the Patea River for the Stratford town water supply. This permit was issued by the Council on 20 July 1998 under Section 87(a) of the RMA. The conditions related to fish passage were changed in March 2000 to allow for research and the formulation of a decision concerning trout access to the Patea River above the weir. It expired on 1 June 2016. An application to renew this consent has been received, however this dam remains unconsented as the application is processed.

These consents require the structure to provide of fish passage and require the maintenance of fish passage structures. Consent 6459 (to undertake maintenance of the Konini weir) also sets out requirements for notification of works, timeframes for works and limits effects in the stream as a result of works.

1.3 Monitoring programme

1.3.1 Introduction

Section 35 of the RMA sets out obligations upon the Council to gather information, monitor, and conduct research on the exercise of resource consents, and the effects arising, 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 SDC's water treatment plants consisted of four primary components.

1.3.2 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;
- in discussion over monitoring requirements;
- preparation for any reviews;
- renewals;
- new consents;
- advice on the Council's environmental management strategies and content of regional plans and;

- consultation on associated matters.

1.3.3 Site inspections

All of SDC's WTP's, and their 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 back wash discharges, intake structures and water metering equipment. 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.

1.3.4 Chemical sampling

The backwash discharge at the Stratford WTP was sampled once, and the sample analysed for free available chlorine, pH, suspended solids and turbidity.

1.3.5 Data review

All of the water abstraction consents held by the SDC in regard to WTP's contain a condition which requires the SDC to keep records of abstraction volumes and make these records available to the Council upon request. Currently live data from Stratford Midhurst and Toko WTP's is being telemetered to Council databases. All data is reviewed to assess compliance in regard to volumes and abstraction rates of water taken and, where available, flow conditions of the source stream or river.

2. Results

2.1 Inspections

Each site was visited at least once during the monitoring period. Inspections focussed on flow meters, abstraction rates/volumes, discharges, and where applicable the condition of weirs and fish passes.

2.1.1 Midhurst WTP

The plant was not abstracting at the time of the inspection and the reported abstraction rate (of zero) matched the telemetered data. A review of the data to date showed that the plant has been compliant with abstraction rates and volumes for the period under review. No issues were noted with the soakage pits and no discharges to the stream were being made.

2.1.2 Stratford WTP

The discharge pond was inspected and it was found that there were no discharges occurring at the time. It was outlined that the pond had self sealed with coagulants and with less seepage, discharges were now occurring more often. At the time of the inspection the water level in the pond was just below the outlet pipe.

The Konini weir appeared to be working well. Eight cubic meters of concrete had been laid on the true left bank to prevent water bypassing the weir and the fish pass. Plans had also been drawn up to put rip rap in the scoured out areas of the concrete apron. The fish pass was free of debris and had good flow. The Patea weir was found to be in good condition and no issues were noted.

The plant was abstracting 71 m³/hr from the Konini Stream and there was a combined abstraction of 172 m³/hr from the Patea River and Konini Stream. These rates were within consent conditions and matched the telemetered data.

2.1.3 Toko WTP

23 September 2015

The new plant had been installed and was up and running, however, telemetry had yet to be commissioned at the site. The flow meter appeared to be installed correctly and verification had been arranged. It was outlined that the soak holes may require maintenance as one of them overflowed during the most recent back wash and that the consent holder was planning works to improve the soak holes.

31 March 2016

The plant was not abstracting at the time of the inspection and this matched the telemetered data. A review of the data to date showed that the plant was compliant with abstraction rates and volumes. The soakage pits had been cleaned out and no issues were noted. The inspector was informed that a much larger soakage pit was to be constructed. It was noted that air entrainment in the bore head works had caused the abstraction meter to fail National Environmental Standards (NES) verification and works were planned to remediate the bore and have the meter re-verified. The plant outflow meter was been monitored to ensure compliance with consent conditions.

2.2 Results of discharge monitoring

A sample of the filter backwash discharge from the Stratford WTP settling pond was collected on 5 May 2015.

Table 2 Sample from backwash pond at Stratford (site STW0002034)

Parameter	Unit	Result	Consent 0068-3 limits
Free chlorine	g/m ³	0.06	0.1
pH	pH	6.9	-
Suspended solids	g/m ³	9	20
Turbidity	NTU	3.1	-

The pond was not discharging at the time and the sample was taken near the pond outlet and this was found to be within the limits set by consent conditions.

2.3 Abstraction data

SDC provided data from all three plants, during the monitoring period either manually or via telemetry. 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 3.

Table 3 Summary of compliance with abstraction data and abstraction limits

Site	Records supplied on time?	%Compliance daily volumes	%Compliance abstraction rate	%Completeness of data
Stratford (Patea)	Yes	N/A	>99% compliance during normal operations	100%
			60% - 96% during numerous short periods when low flow restrictions were in place.	
Stratford (Konini)	Yes	N/A	97%	100%
Midhurst	Yes	100%	100% during normal ops	100%
			100% during restricted period	
Toko	Yes	100%	100%	100%

During the year SDC demonstrated a good level of compliance with abstraction rates and volumes. Some exceedances were noted in the Patea River abstraction during the low flow period when the Patea River was below 725 L/s at Skinner Rd. However it is noted that there were only very short periods when the low flow restrictions were in

force during the 2015-2016 year and typically the exceedances were likely a result of reaction lag between getting the alarms from the Skinner Rd flow telemetry and adjusting the intake rates. The over abstraction from the Patea Stream system was compliant with consent conditions.

2.4 Investigations, interventions, and incidents

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 SDC. 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 courses of non-compliance or failure to maintain good practices. A pro-active approach that in the first instance avoids issues occurring is favoured.

The Council operates and maintains a register of all complaints or reported and discovered excursions from acceptable limits and practices, including non-compliance with consents, which may damage the environment. The Incident Register (IR) includes events where the Company concerned has itself notified the Council. The register contains details of any investigation and corrective action taken.

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 company is indeed the source of the incident (or that the allegation cannot be proven).

In the 2015-2016 period, the Council was not required to record incidents in association with the SDC water treatment activities. However despite repeated reminders by Council staff, renewal applications for the weirs in the Konini Stream and Patea River and fur discharges from the Stratford WTP were submitted by SDC too late to qualify for ongoing protection of section 124 of the RMA. As a result the consents expired during application processing. As SDC provided the applications for consent renewal prior to the existing consents expiring, no enforcement action was considered necessary on this occasion. The Council notes that there are no environmental effects anticipated from these oversights.

3. Discussion

3.1 Discussion of SDC performance

Overall SDC demonstrated a good level of performance in relation to its water WTP's. Some minor exceedances were noted in the abstraction from the Patea River during low flow periods, however, the level of compliance improved as the low flow periods continued.

The Toko plant telemetry was installed and now all sites are sending data every two hours to the Councils databases.

Improvements were made at the Konini Weir to ensure more flow was available for abstraction during low flow periods and ensure there is good flow in the fish pass. Further improvements to the weir's apron to reduce downstream scouring are also planned.

Issues with filing consent renewal applications in a timely manner have resulted in the consent for the Patea and Konini weirs and the Stratford WTP backwash discharge expiring on 1 June 2016. Applications to renew these consents have been received and in the case of the Patea and Konini weirs, these were being processed at the time of preparation of the report. The Stratford WTP discharge consent application was granted on 25 June 2016, however, for a short period this discharge was unconsented.

3.2 Environmental effects of exercise of consents

During the period under review there were minor issues with SDC reacting to low flow restrictions in the Patea River, however the level of compliance improved as the dry season continued. It was noted that the combined take from the Patea Stream system was not exceeded and therefore the overtaking would not likely to have exacerbated the <67% mean annual low flow conditions recorded at the Skinner Rd telemetry station.

The backwash pond at the Stratford WTP rarely discharges due to the large capacity of the pond. A sample of the pond water indicated that it would not have any significant effects if it were to discharge.

The weir in the Patea River is likely to present a barrier to the passage of trout within the river. However, this effect may be beneficial in providing a trout-free reserve for native fish upstream of the weir. Consent 5353-1 required the installation of a structure at the weir that provides unrestricted passage of fish by 1 July 2005. However, as a requirement of the new consents granted for the Patea hydro-electric dam (located downstream of the weir), 'target species' juveniles are to be manually transferred into the headwaters of the Patea Catchment from the lower river. One of the release sites is located immediately upstream of the weir. The requirement for a fish pass at the weir is therefore currently on hold. The success of the upstream transfer programme will be assessed in approximately five years time, at which point, it will be determined whether this fish pass requirement should remain on hold. If the transfer of juvenile fish into the headwaters is abandoned, it is likely that a fish pass will need to be installed.

Monitoring of the Toko and Midhirst WTP's indicated that these plants were not having any adverse effects on the environment.

3.3 Evaluation of performance

A tabular summary of the SDC compliance record for the year under review is set out in Tables 4 to 12.

3.3.1 Stratford WTP

Table 4 Summary of performance for consent 0068-3

Purpose: To discharge settled filter backwash water from the Stratford municipal WTP via a settling pond into the Patea River		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Proper and efficient maintenance of settlement pond	Inspection	Yes
2. Re-location of outlet from pond to prevent short circuit between inlet and outlet within two months of granting of consent	Inspection	Yes
3. Discharge not to cause certain effects in the Patea River below the mixing zone	Sampling	Yes
4. Limits on suspended solids and chlorine in the discharge	Sampling	Yes
5. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		Poor*

N/A = not applicable * Poor rating due to consent expiring as a result of late renewal applications

Table 5 Summary of performance for Consent 0195-2

Purpose: To take and use water from the Patea River for Stratford town water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Recording of abstraction rates and provision of data to Council	Data provided upon request	Yes
2. Limit on abstraction rates during normal flows	Data review	Yes
3. Requirement to reduce abstraction when Patea flow is less than 725 L/s	Data review	Minor non-compliance
4. Ability to maintain maximum abstraction rate to establish reservoir storage following plant failure	Liaison with consent holder – not exercised	N/A
5. Implementation of water conservation measures when flow in Patea at or below MALF	Liaison with consent holder and monitoring of stream flows	Yes

Purpose: To take and use water from the Patea River for Stratford town water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
6. Mitigation of effects by riparian planting	Planting carried out as required in previous years	Yes
7. Right of Council to suspend or reduce abstraction during extreme low flows	Monitoring of flows	Not required
8. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		Good
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 6 Summary of performance for Consent 1421-2

Purpose: To take and use water from the Konini Stream a tributary of the Paetahi Stream in the Patea catchment for Stratford town water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Recording of abstraction rates and provision of data to Council	Data provided upon request	Yes
2. Limit on abstraction rates	Review abstraction data	Yes
3. Implementation of water conservation measures when flow in Patea at or below MALF	Liaison with consent holder and monitoring of stream flows	Yes
4. Right of Council to suspend or reduce abstraction during extreme low flows	Monitoring of flows	Not required
5. 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 this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 7 Summary of performance for Consent 2452-2

Purpose: To dam the Konini Stream a tributary of the Paetahi Stream in the Patea Catchment for the Stratford town water supply		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Maintenance of a fish pass at the weir	Inspection and liaison with consent holder.	Yes
2. Monitoring of effectiveness of the fish pass	Triennial fish spawning survey	Yes
3. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		Poor*

N/A = not applicable * Poor rating due to consent expiring as a result of late renewal applications

Table 8 Summary of performance for Consent 5353-1

Purpose: To dam the Patea River for the Stratford town water supply		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Maintenance of a fish pass at the weir	Inspection and liaison with consent holder – no fish pass at weir. This requirement is on hold.	N/A
2. Construction of the fish pass by 1 July 2005 with no disturbance of the River bed between 1 May and 31 October. Maintenance of the fish pass to the satisfaction of the Council	Inspection and liaison with consent holder. This requirement is on hold.	N/A
3. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		N/A
Overall assessment of administrative performance in respect of this consent		Poor*

N/A = not applicable * Poor rating due to consent expiring as a result of late renewal applications

3.3.2 Midhurst WTP

Table 9 Summary of performance for Consent 1276-3

Purpose: To take water from the Te Popo Stream a tributary of the Manganui River in the Waitara catchment for Midhurst community public water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Exercise of consent in accordance with information submitted in support of application	Inspection and liaison with consent holder	Yes
2. Adoption of best practicable option	Inspection and liaison with consent holder	Yes
3. Limit on abstraction rate	Abstraction data provided	Yes
4. Average monthly rate of abstraction not to exceed 254 m ³ /day between November-March	Abstraction data provided	Yes
5. Rate of abstraction not to exceed 432 m ³ /day between April-October	Abstraction data provided	Yes
6. Total amount of water taken not to exceed 90,000 m ³	Abstraction data provided	Yes
7. Annual Report on leaks and water efficiency and conservation	Report not due at time of writing report. Report provided each year since 2011.	N/A
8. Screening of intake structures	Inspection	Yes
9. Recording of abstraction rates and provision of data to Council	Abstraction data provided	No
10. Right of Council to suspend or reduce abstraction during extreme low flows	Monitoring of flows – no extreme low flows in monitoring year	N/A

Purpose: To take water from the Te Popo Stream a tributary of the Manganui River in the Waitara catchment for Midhirst community public water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
11. Optional review provision	No further option to review	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable;

Table 10 Summary of performance for Consent 1331-3

Purpose: To discharge treated filter backwash water from the Midhirst WTP into the Te Popo Stream in the Waitara Catchment via a soak hole		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Limit on discharge rates	Inspection and review of data	Yes
2. Proper and efficient maintenance of soak hole system	Inspection	Yes
3. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

3.3.3 Toko WTP

Table 11 Summary of performance for Consent 1337-3

Purpose: To take and use groundwater from a bore in the vicinity of the Toko Stream in the Patea catchment for Toko rural water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Adoption of best practicable option	Inspection/ Review of data	Yes
2. Consent to be exercised in accordance with the application	Inspection/ Review of data	Yes
3. Notification of Council prior to exercise of consent	Not applicable	N/A

Purpose: To take and use groundwater from a bore in the vicinity of the Toko Stream in the Patea catchment for Toko rural water supply purposes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
4. Limit on abstraction rate and volume	Review abstraction data	Yes
5. Installation and operation of meter to record abstraction rates and provide data	Data provided upon request	Yes
6. Lapse provision	Not applicable	N/A
7. Optional review provision	No further option for review prior to expiry	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

Table 12 Summary of performance for Consent 6605-1

Purpose: To discharge treated filter backwash water from the Toko WTP into the Toko Stream in the Patea catchment via soak holes		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
1. Limit on discharge volume	Review of data supplied	Yes
2. Maintenance and operation of soak hole system to ensure compliance with consent conditions	Inspection	N/A
3. Discharge not to cause certain effects in the Toko Stream below the mixing zone	Inspection	N/A
4. Limit on chlorine in the discharge	Not sampled in this monitoring period	N/A
5. Optional review provision	Next option for review in June 2016	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent		High
Overall assessment of administrative performance in respect of this consent		High

N/A = not applicable

During the year, the SDC demonstrated a high level of environmental and a poor level of administrative performance with the resource consents as defined in Section 1.1.4. The poor rating is a result of SDC failing to apply for the renewal of the consents for the weirs on the Konini Stream and Patea River in a timely manner. As a result these consent expired and the weirs are currently still un-consented. It also noted that for short period the Stratford WTP discharge was unconsented for the same reason.

During the period there were also some minor issues with exceedances in abstraction rates from the Patea Stream during the brief intermittent low flow periods experienced during December 2015 and January 2016.

3.4 Recommendations from the 2014-2015 Annual Report

In the 2014-2015 Annual Report, it was recommended:

1. THAT monitoring of consented activities at SDC's WTP's in the 2015-2016 year continuing at the same level as in 2014-2015.
2. THAT the option for a review of resource consent(s) 6459, 1331, and 6605 in June 2016 as set out in consent conditions not be exercised, on the grounds that current conditions are adequate to deal with any adverse effects on the environment arising from the exercise of these resource consent, which were either not foreseen at the time the applications were considered or which it was not appropriate to deal with at the time.

These recommendations were implemented in full.

3.5 Alterations to monitoring programmes for 2016-2017

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

- the extent of information made available by previous authorities;
- its relevance under the RMA;
- its obligations to monitor emissions/ discharges and effects under the RMA; and
- to report 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 emitting to the atmosphere/ discharging to the environment

It is proposed that for 2016-2017 that the programme remains unchanged from that of 2015-2016 with the addition of the triennial fish survey that is scheduled to undertaken.

4. Recommendations

THAT monitoring of consented activities at Stratford District Council's water treatment plants in the 2016-2017 year continue at the same level as in 2015-2016 with the addition of the triennial fish survey due in the 2016-2017 monitoring period.

Glossary of common terms and abbreviations

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

Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m.
Cumec	A volumetric measure of flow- 1 cubic metre per second (1 m ³ s ⁻¹).
Fresh	Elevated flow in a stream, such as after heavy rainfall.
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.
IR	The Incident Register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
L/s	Litres per second.
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.
NTU	Nephelometric Turbidity Unit, a measure of the turbidity of water.
O&G	Oil and grease, defined as anything that will dissolve into a particular organic solvent (e.g. hexane). May include both animal material (fats) and mineral matter (hydrocarbons).
pH	A numerical system for measuring acidity in solutions, with 7 as neutral. Numbers lower than 7 are increasingly acidic and higher than 7 are increasingly alkaline. The scale is logarithmic i.e. a change of 1 represents a ten-fold change in strength. For example, a pH of 4 is ten times more acidic than a pH of 5.
Physicochemical	Measurement of both physical properties (e.g. temperature, clarity, density) and chemical determinants (e.g. metals and nutrients) to characterise the state of an environment.
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	<i>Resource Management Act</i> 1991 and including all subsequent amendments.
Temp	Temperature, measured in °C (degrees Celsius).
Turb	Turbidity, expressed in NTU.
UI	Unauthorised Incident.

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Appendix I

Resource consents held by Stratford District Council

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

TRK980068

DISCHARGE PERMIT

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

Name of STRATFORD DISTRICT COUNCIL
Consent Holder: PO BOX 320 STRATFORD

Renewal
Granted Date: 24 February 1998

CONDITIONS OF CONSENT

Consent Granted: TO DISCHARGE UP TO 140 CUBIC METRES/DAY OF
SETTLED FILTER BACKWASH WATER FROM THE
STRATFORD MUNICIPAL WATER TREATMENT PLANT VIA A
SETTLING POND INTO THE PATEA RIVER AT OR ABOUT
GR: Q20:167-068

Expiry Date: 1 June 2016

Review Date[s]: June 2004 and June 2010

Site Location: CARDIFF ROAD STRATFORD

Legal Description: PT SEC 53A BLK I NGAERE SD

Catchment: PATEA 343.000

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

TRK980068

General conditions

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

Special Conditions

- 1. THAT the consent holder shall properly and efficiently maintain and operate the settlement pond system.
- 2. THAT the consent holder shall undertake to re-locate the outlet from the settlement pond to a suitable position for the purposes of preventing a short-circuit between the inlet and outlet, and provision of improved settlement of sediment within the pond; the relocation work to be completed within two months of the granting of the consent.
- 3. THAT after allowing for a mixing zone of 50 metres downstream of the discharge, the discharge shall not give rise to any of the following effects in the Patea River:
 - i) the production of any conspicuous oil or grease films, scums or foams, or floatable or suspended materials;
 - ii) any conspicuous change in the colour or visual clarity;
 - iii) any emission of objectionable odour;
 - iv) the rendering of fresh water unsuitable for consumption by farm animals; and
 - v) any significant adverse effects on aquatic life;
- 4. THAT the discharge quality shall not exceed the following limits at all times:

Suspended solids	20 gm ⁻³
Free available chlorine	0.1 gm ⁻³
- 5. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, for the purpose of ensuring that the conditions adequately deal with the environmental effects arising from the exercise of this consent, which were not foreseen at the time the application was considered and which it was not appropriate to deal with at that time.

Signed at Stratford on 24 February 1998

For and on behalf of
TARANAKI REGIONAL COUNCIL

DIRECTOR—RESOURCE MANAGEMENT

TRK980195

WATER PERMIT

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

Name of
Consent Holder: STRATFORD DISTRICT COUNCIL
PO BOX 320 STRATFORD

Renewal
Granted Date: 20 July 1998

CONDITIONS OF CONSENT

Consent Granted: TO TAKE, DAM AND USE UP TO 6,964 CUBIC METRES/DAY
[61 LITRES/SECOND] OF WATER FROM THE PATEA RIVER
FOR STRATFORD TOWN WATER SUPPLY PURPOSES AT
OR ABOUT GR: Q20:163-070

Expiry Date: 1 June 2016

Review Date[s]: June 2004 and June 2010

Site Location: CARDIFF ROAD, STRATFORD

Legal Description: ROAD RESERVE BLK I NGAERE SD

Catchment: PATEA 343.000

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

TRK980195

General conditions

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

Special conditions

- 1. THAT the consent holder shall record daily rates of abstraction and shall make such records available to the Taranaki Regional Council upon request.
- 2. THAT during normal operations the combined water abstraction including water from the Konini Stream [consent TRK981421] shall not exceed 61 litres/second and that the combined maximum of 81 litres/second may only be used for temporary periods to re-establish reservoir storage following a plant failure. The consent holder shall notify the Taranaki Regional Council whenever the peak abstraction is to be exercised.
- 3. THAT the consent holder shall reduce the abstraction from the Patea River to no more than 41 litres/second when the river is under mean annual low flow conditions or less, equivalent to a flow of 725 litres/second or less measured at Skinner Road [Q20:260-064].
- 4. THAT notwithstanding condition 3, the consent holder may temporarily maintain the maximum abstraction rate of 61 litres/second to establish reservoir storage following plant failure in accordance with condition 2.
- 5. THAT the consent holder shall implement water conservation measures to reduce the water demand at times when the Patea River is under mean annual low flow conditions or less, equivalent to a flow of 725 litres/second or less measured at Skinner Road (Q20:260-064).
- 6. THAT the consent holder shall mitigate the effects of the abstraction by promoting and undertaking riparian management in the Patea River catchment by:
 - i) a donation of \$9,000 to the Taranaki Tree Trust by 1 January 1999;
 - ii) a contribution of \$9,000 (apportioned over the term of the consent), for riparian works by the consent holder in a manner approved by the Taranaki Regional Council. Further, by 30 June 2004, any remaining funds shall be paid in full to the Taranaki Tree Trust or any other water conservation project approved by the Taranaki Regional Council.
- 7. THAT the Taranaki Regional Council reserves the right to temporarily suspend or reduce the abstraction during extreme low flow events, in order to protect the biological communities in the stream, in accordance with section 329 of the Resource Management Act 1991.

TRK980195

8. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or 2010, 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 consent, which were not foreseen at the time the application was considered and which it was not appropriate to deal with at that time.

Signed at Stratford on 20 July 1998

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: Stratford District Council
P O Box 320
STRATFORD

Review Completed Date: 5 August 2004 [Granted: 20 July 1998]

Conditions of Consent

Consent Granted: To take and use water from the Konini Stream a tributary of the Paetahi Stream in the Patea catchment for Stratford town water supply purposes at or about GR: Q20:157-068

Expiry Date: 1 June 2016

Review Date(s): June 2004, June 2010

Site Location: Cardiff Road, Pembroke, Stratford

Legal Description: DP 3278 Pt Sec 25 Pt DP 3759 Pt Secs 25 & 26 Blk IV
Kaupokonui SD

Catchment: Patea

Tributary: Paetahi
Konini

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 record daily rates of abstraction and shall make such records available to the Taranaki Regional Council upon request.
2. During normal operations the combined water abstraction including water from the Patea River [consent 0195] shall not exceed 61 litres/second and that the combined maximum of 81 litres/second may only be used for temporary periods to re-establish reservoir storage following a plant failure. The consent holder shall notify the Taranaki Regional Council whenever the peak abstraction is to be exercised.
3. The consent holder shall implement water conservation measures to reduce the water demand at times when the Patea River is under mean annual low flow conditions or less, equivalent to a flow of 725 litres/second or less measured at Skinner Road [Q20:260-064].
4. The Taranaki Regional Council reserves the right to temporarily suspend or reduce the abstraction during extreme low flow events, in order to protect the biological communities in the stream, in accordance with section 329 of the Resource Management Act 1991.

Consent 1421-2

5. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, 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 consent, which were not foreseen at the time the application was considered and which it was not appropriate to deal with at that time.

Signed at Stratford on 5 August 2004

For and on behalf of
Taranaki Regional Council

Director-Resource Management

TRK982452

WATER PERMIT

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

Name of
Consent Holder: STRATFORD DISTRICT COUNCIL
PO BOX 320 STRATFORD

Renewal
Granted Date: 20 July 1998

CONDITIONS OF CONSENT

Consent Granted: TO DAM THE KONINI STREAM A TRIBUTARY OF THE
PAETAHI STREAM IN THE PATEA CATCHMENT FOR THE
STRATFORD TOWN WATER SUPPLY AT OR ABOUT GR:
Q20:155-068

Expiry Date: 1 June 2016

Review Date[s]: June 2004 and June 2010

Site Location: CARDIFF ROAD, STRATFORD

Legal Description: DP3278 PT SEC 25 PT DP3759 SECS 25 & 26 BLK IV
KAUPOKONUI SD

Catchment: PATEA 343.000

Tributary: PAETAHI 343.310
KONINI 343.311

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

TRK982452

General conditions

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

Special conditions

- 1. THAT the consent holder shall maintain a structure at the weir to provide for the unrestricted passage of native fish, juvenile and adult trout.
- 2. THAT the consent holder shall monitor the effectiveness of the fish pass in providing for the passage of adult trout.
- 3. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, 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 consent, which were not foreseen at the time the application was considered and which it was not appropriate to deal with at that time.

Signed at Stratford on 20 July 1998

For and on behalf of
TARANAKI REGIONAL COUNCIL

DIRECTOR—RESOURCE MANAGEMENT

Land Use Consent

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

Name of
Consent Holder: Stratford District Council
P O Box 320
STRATFORD

Change To
Conditions Date: 22 March 2000 [Granted: 20 July 1998]

Conditions of Consent

Consent Granted: To dam the Patea River for the Stratford town water supply
at or about GR: Q20:163-070

Expiry Date: 1 June 2016

Review Date(s): June 2004, June 2010

Site Location: Cardiff Road, Cardiff, Stratford

Legal Description: River Reserve Blk I Ngaere SD

Catchment: Patea

General conditions

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

Special conditions

- 1. THAT the consent holder shall design and install a structure at the weir to provide for the unrestricted passage of fish. The species of fish that the fish pass is to be designed for shall be determined prior to its installation, to the approval of the General Manager, Taranaki Regional Council.
- 2. THAT the fish pass structure, required by condition 1, shall be constructed by 1 July 2005, and thereafter be maintained and operated to the satisfaction of the General Manager. In constructing the fish pass structure, there shall be no disturbance of any part of the bed covered by water between 1 May and 31 October.
- 3. THAT the Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2004 and/or June 2010, 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 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 22 March 2000

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: Stratford District Council
P O Box 320
STRATFORD

Consent Granted
Date: 31 January 2005

Conditions of Consent

Consent Granted: To repair and maintain an existing weir structure in the
Konini Stream a tributary of the Paetahi Stream in the
Patea catchment at or about GR: Q20:157-068

Expiry Date: 1 June 2022

Review Date(s): June 2010, June 2016

Site Location: Cardiff Road, Cardiff, Stratford

Legal Description: Pt Secs 25 DP 3759 Blk IV Kaupokonui SD

Catchment: Patea

Tributary: Paetahi
Konini

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 notify the Taranaki Regional Council at least 48 hours prior to the commencement and upon completion of the initial activity and again prior to and upon completion of any subsequent maintenance works which would involve disturbance of or deposition to the riverbed or discharges to water.
2. Any instream works shall take place only between 1 November and 30 April inclusive, except where this requirement is waived in writing by the Chief Executive, Taranaki Regional Council.
3. The consent holder 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 riverbed and to avoid or minimise the disturbance of the riverbed and any adverse effects on water quality.
4. The consent holder shall ensure that the area and volume of riverbed disturbance shall, so far as is practicable, be minimised and any areas which are disturbed shall, so far as practicable, be reinstated.
5. The exercise of this consent shall be under taken generally in accordance with the documentation submitted in support of application 3542. In the case of any contradiction between the documentation submitted in support of application 3542 and the conditions of this consent, the conditions of this consent shall prevail.
6. The structure[s] which are the subject of this consent shall not cause erosion of the river channel, and measures shall be taken by the consent holder to prevent erosion of the river channel.

7. After allowing for reasonable mixing, being a mixing zone extending seven times the width of the Konini Stream at the point of discharge, any discharge of contaminants shall not give rise to any of the following effects in the Konini 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.

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 2010 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 31 January 2005

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: Stratford District Council
P O Box 320
STRATFORD 4352

Decision Date [Change]: 24 May 2011

Commencement Date [Change]: 24 May 2011 [Granted: 9 June 2003]

Conditions of Consent

Consent Granted: To take water from the Te Popo Stream a tributary of the Manganui River in the Waitara catchment for Midhirst community public water supply purposes at or about (NZTM) 1708930E-5650525N

Expiry Date: 1 June 2021

Review Date(s): June 2015

Site Location: Mountain Road, Midhirst

Legal Description: Lot 7 DP 14836 Blk XIII Huiroa SD [Site of take]

Catchment: Waitara

Tributary: Manganui
Te Popo

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

General conditions

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

Special conditions

1. The exercise of this consent shall be conducted in accordance with the information submitted in support of application nos. 84/51, 91/162, 2233 and 6750, 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. The peak extraction rate shall not exceed 5 litres/second.
4. The amount of water taken in summer [1 November to 31 March] shall not exceed an average of 254 cubic metres/day during any calendar month.
5. The amount of water taken in winter [1 April to 31 October] shall not exceed 432 cubic metres/day.
6. The amount of water taken during any year ending 30 June shall not exceed 90,000 m³.
7. The consent holder shall, on an annual basis, provide a report detailing:
 - a) the work done to detect and minimise leaks in the area supplied, and
 - b) water use efficiency and conservation measures undertaken in the area supplied.

The report shall be provided to the Chief Executive, Taranaki Regional Council before 1 September each year and cover the previous 1 July to 30 June period. The first report shall be provided by 1 September 2011.

8. All intake structures shall be screened to avoid the entrainment of fish.

Consent 1276-3

9. 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.
10. That the Taranaki Regional Council reserves the right to temporarily suspend or reduce the abstraction during extreme low flow events, in order to protect the biological communities in the stream, in accordance with 329 of the Resource Management Act 1991.
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 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 24 May 2011

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: Stratford District Council
PO Box 320
Stratford 4352

Decision Date: 27 May 2016

Commencement Date: 27 May 2016

Conditions of Consent

Consent Granted: To discharge treated filter backwash water from the Midhirst Water Treatment Plant onto land via a soak hole

Expiry Date: 1 June 2033

Review Date(s): June 2021, June 2027

Site Location: Midhirst Water Treatment Plant, Mountain Road, Midhirst

Grid Reference (NZTM) 1708926E-5650535N

Catchment: Waitara

Tributary: Manganui
Te Popo

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

General condition

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

Special conditions

1. The discharge shall not exceed 10 cubic metres per day.
2. The consent holder shall maintain and operate the soak hole system in a manner that will ensure that the discharge does not cause the soak hole to overflow.
3. 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 June 2021 and/or June 2027, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 27 May 2016

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: Stratford District Council
P O Box 320
STRATFORD

Consent Granted
Date: 17 June 2005

Conditions of Consent

Consent Granted: To take and use groundwater from a bore in the vicinity of the Toko Stream in the Patea catchment for Toko rural water supply purposes at or about GR: Q20:298-068

Expiry Date: 1 June 2022

Review Date(s): June 2010, June 2016

Site Location: East Road, Toko

Legal Description: Lot 1 DP 15670 Blk III Ngaere SD

Catchment: Patea

Tributary: Toko

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 2743 and shall ensure efficient and effective use of water. In the case of any contradiction between the documentation submitted in support of application 2743 and the conditions of this consent, the conditions of this consent shall prevail.
3. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least seven days prior to the exercise of this consent.
4. The volume of groundwater abstracted shall not exceed 80 cubic metres per day at a rate not exceeding 5.6 litres per second.
5. The consent holder shall install and operate a 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.
6. 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.

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 2010 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 17 June 2005

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: Stratford District Council
P O Box 320
STRATFORD

Consent Granted
Date: 29 April 2005

Conditions of Consent

Consent Granted: To discharge treated filter backwash water from the Toko Water Treatment Plant into the Toko Stream in the Patea catchment via soak holes at or about GR: Q20:298-068

Expiry Date: 1 June 2022

Review Date(s): June 2010, June 2016

Site Location: East Road, Toko

Legal Description: Lot 1 DP 15670 Blk III Ngaere SD

Catchment: Patea

Tributary: Toko

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 discharge shall not exceed 4 cubic meters per day, per soak hole.
2. The consent holder shall properly and efficiently maintain and operate the soak hole system so as to meet the conditions of this consent.
3. After allowing for reasonable mixing, with a mixing zone extending 20 meters below the discharge point, the discharge shall not give rise to any of the following effects in the Toko Stream:
 - a) the production of any conspicuous oil or grease films, scum or foams, or floatable or suspended materials;
 - b) any conspicuous change in the colour or visual clarity;
 - c) any emission of objectionable odour;
 - d) the rendering of fresh water unsuitable for consumption by farm animals;
 - e) any significant adverse effects on aquatic life, habitats, or ecology.
4. The discharge shall not exceed 0.1 g/m³ cubic meters free available chlorine at all times.

Consent 6605-1

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 June 2010 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 29 April 2005

For and on behalf of
Taranaki Regional Council

Director-Resource Management

