Wai-iti Motor Camp Monitoring Programme Annual Report 2014-2015

Technical Report 2015-15

ISSN: 1178-1467 (Online) Document: 1489089 (Word) Document: 1549411 (Pdf) Taranaki Regional Council Private Bag 713 STRATFORD

September 2015

Executive summary

Wai-iti Motor Camp Limited (the Company) operates at Wai-iti Beach in North Taranaki. The Company holds a resource consent to discharge septic tank treated sewage to groundwater via soakage trenches. The Company also holds a consent to erect, place and maintain a rock revetment wall along the front of the motor camp on the Wai-iti Beach foreshore. Together, the two consents include a total of 24 conditions setting out the requirements that the Company must satisfy.

This report for the period July 2014-June 2015 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the administrative and environmental performance of the Company during the period under review.

During the monitoring period, Wai-iti Motor Camp Limited demonstrated an overall high level of environmental performance.

The Council's monitoring programme for the year under review included three inspections of the wastewater system, including one inspection of the rock rip-rap seawall, and bacteriological water sampling of the Wai-iti Stream and Wai-iti Beach on one occasion.

The monitoring showed a good level of management and operation of the disposal system during the monitoring period as indicated by inspections and bacteriological sampling. *E. coli* counts were high in all Wai-iti Stream samples, including the sample taken upstream of the septic tank system. High faecal indicator bacteria counts are not unusual in streams which drain developed farmland, however further investigation has been recommended to isolate the major contributing sources of faecal contamination. The enterococci counts were low at both coastal sites and did not exceed the Ministry for the Environment 'Alert' guideline for recreational bathing.

In general, the rock rip rap seawall appeared to be structurally sound, however, there were signs of continued erosion at the top of the wall towards the southern end of the beach. The large tree trunks were still in place and appeared to be providing a degree of protection for the banks behind them. Signage was still in place informing the public of the erosion and the dune replanting efforts.

During the year, the Company demonstrated a high level of environmental and administrative performance and compliance with the resource consents, and there were no unauthorised incidents reported in relation to the motor camp. No adverse environmental effects were observed as a result of the wastewater system or rock revetment structure.

This report includes recommendations for the 2015-2016 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 2014-June 2015 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by Wai-iti Motor Camp Limited (the Company). The Company operates a camping ground situated on both sides of the Wai-iti Stream in North Taranaki (Photos 1 & 2).

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consent held by the Company that relates to septic tank treated sewage effluent to groundwater via soakage trenches and the structural integrity of the seawall. This is the 26th Annual Report to be prepared by the Council to cover the Company's water discharges and their effects.



Photo 1 Wai-iti Motor Camp



Photo 2 Wai-iti Beach (16th December 2014)

1.1.2 Structure of this report

Section 1 of this report is a background section. It sets out general information about compliance monitoring under the *Resource Management Act* 1991 (RMA) and the Council's obligations and general approach to monitoring sites through annual programmes, the resource consents held by Wai-iti Motor Camp Limited in the Wai-iti catchment, the nature of the monitoring programme in place for the period under review, and a description of the activities and operations conducted in the Wai-iti Motor Camp.

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 2015-2016 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);
- (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 the consent holder/s during the period under review, this report also assigns a rating as to each Company's environmental and administrative performance.

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

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

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

Environmental Performance

- **High** No or inconsequential (short-term duration, less than minor in severity) breaches of consent or regional plan parameters resulting from the activity; no adverse effects of significance noted or likely in the receiving environment .The Council did not record any verified unauthorised incidents involving 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 2014-2015 year, 75% 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 22% demonstrated a good level of environmental performance and compliance with their consents

1.2 Process description

1.2.1 Sewage treatment system

All wastewaters from the camping ground enter a septic tank of 143 m³ capacity. The effluent is then pumped via a 50 mm alkathene pipe across the Wai-iti Stream and into soakage trenches situated on a wooded hillside approximately 30 metres from the stream.

These multiple soakage trenches work on a rotational basis and were first commissioned in 1991 in response to inadequate treatment of the effluent by the previous system. There have been no significant problems since installation of the new system.

When previous proprietors took over the property in 1986-1987, the disposal system consisted of a seepage ditch situated near the base of the wooded hillside. Monitoring found that this trench system was not a suitable means of disposal, resulting in high faecal coliform counts at the mouth of the Wai-iti Stream. This inadequate treatment led to the development of the new multiple soakage trench system.

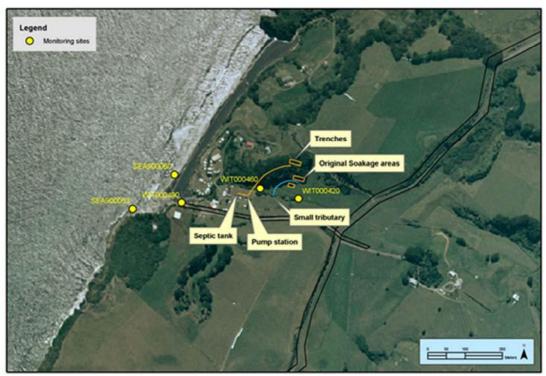


Figure 1 Location of sewage treatment system and sampling sites at the Wai-iti Motor Camp

1.2.2 Rock rip rap seawall

Over the summer and autumn months of 2004, rough seas combined with high tides reached the beach toe of the coastal banks and sand dunes that front the motor camp. Fresh erosion scarps were cut into these banks for nearly the full beach frontage where no system of protection existed (Photograph 3).

In 2005 an application was received for a resource consent to provide boulder rip rap protection over a total distance of 293 metres from the stream at the south end of Waiiti Beach to an area of existing large boulder protection in the north. This consent was granted in July 2005. To mitigate any possible end effects, the area between the public entrance and the river was also protected using the boulder rip rap method.



Photo 3 Erosion on Wai-iti foreshore prior to construction of the rock rip rap seawall

1.3 Resource consents

1.3.1 Water discharge permit

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.

The Company holds water discharge permit **1971-3** to cover the discharge of up to 27 cubic metres per day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Wai-iti Stream.

This permit was first issued by the Council on 21 August 1991 and was renewed in 28 March 2003 under Section 87(c) of the RMA. It is due to expire on 1 June 2021.

There are five special conditions attached to the consent.

Condition 1 requires bacteriological monitoring of the coastal waters of the foreshore and Wai-iti Stream.

Condition 2 requires the consent holder to ensure proper maintenance of the septic tank, pumping station and soakage trenches.

Condition 3 requires the consent holder to provide records of daily effluent volumes discharged.

Condition 4 requires the consent holder to provide a contingency plan for the site.

Condition 5 deals with review of the consent.

1.3.2 Coastal structure

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

The Company holds coastal permit **6462-1** to erect, place and maintain a boulder rip rap toe protection in the coastal marine area on the Wai-iti Beach foreshore. This permit was issued in July 2005 under section 87(c) of the RMA. It is due to expire on 1 June 2021.

There are nineteen special conditions attached to the consent. Conditions 1 to 16 deal with various aspects of the construction of the seawall.

Condition 17 deals with monitoring of the wall.

Condition 18 requires the structure to be removed if it is no longer required.

Condition 19 deals with review of consent conditions.

Copies of both permits are attached to this report in Appendix I.

1.4 Monitoring programme

1.4.1 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 and report upon these.

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

The monitoring programme for the Wai-iti Motor Camp consisted of three 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;
- 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.

1.4.3 Site inspections

The Wai-iti site was inspected three times over the monitoring period. These visits took place in December and January which was during and after the normal period of peak camp usage associated with the Christmas break. With regard to the consent for the discharge to groundwater, the main points of interest were plant processes with potential or actual discharges to receiving watercourses, including odours, subsurface seepage, overflow events and system maintenance. The neighbourhood was also surveyed for environmental effects.

In addition, the seawall was checked for any end effects, or further erosion of the banks behind and in front of the wall.

1.4.4 Bacteriological sampling

Samples were collected at five sites (Table 1, Figure 1); three in the Wai-iti Stream and two coastal sites either side of the stream mouth (Figure 1, Photograph 4).

Sites, 1, 3, 4 and 5 have been monitored since the 1994-1995 monitoring period. Site 2, approximately 50 metres downstream of the tributary, was selected during the 1999-2000 monitoring period to assess the influence of the tributary.

Site	Location	Site code	GPS				
1	Wai-iti Stream upstream of beach camp	WIT000420	1727999-5690544				
2	Wai-iti Stream approx. 50 m d/s of tributary	WIT000460	1727896-5690572				
3	Wai-iti Stream adjacent beach entrance	WIT000490	1727686-5690533				
4	Sea coast approx. 75 m north of stream mouth	SEA900060	1727667-5690609				
5	Sea coast approx. 30 m south of stream mouth	SEA900063	1727555-5690516				

Table 1	Location of bacteriological sampling sites at Wai-iti Motor Camp
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Samples were analysed for temperature, conductivity and the faecal indicator bacteria enterococci and *E. coli*. The latter were monitored to provide an indication of potential contamination of the water by animal and/or human excreta.

Water quality is of interest at this site as Wai-iti Beach receives moderate recreational use over the bathing season. In 2003, the Ministry for the Environment (MfE) developed the *Guidelines for Recreational Water Quality* to assess the safety of water for contact recreation. The coastal guidelines focus on enterococci as this indicator provides the closest correlation with health effects in New Zealand coastal waters.

'Alert' and 'Action' guideline levels are summarised in Table 2 and are based on keeping illness risk associated with recreational use to less than approximately 2% of uses. For freshwater the MfE 2003 guidelines use *E. coli* as the preferred indicator (Table 2).

	Indicator	Mode			
	Indicator	Surveillance	Alert	Action	
Marine	Enterococci (cfu/100 ml)	No single sample >140	Single sample >140	Two consecutive single samples >280	
Freshwater	<i>E. coli</i> (cfu/100 ml)	No single sample >260	Single sample >260	Single sample >550	

Table 2Marine recreational bathing guidelines (MfE 2003)



Photo 4 Taken at site 4, looking towards site 5, with the Wai-iti Stream entering from centre left

2. Results

2.1 Inspections

Three inspections of the Company's sewage disposal system were conducted during the monitoring period, with one inspection also including an examination of the seawall.

16 December 2014

The first inspection was undertaken prior to peak usage. The camp was very quiet and there did not appear to be any people staying in the cabins. No odours were detected at the pump station or trenches (Photograph 5). The camp manager was absent at the time of the inspection.



Photo 5 Wai-iti Motor Camp Limited wastewater treatment system, a) trenches on hillside covered with trees, b) pump station

As part of the first inspection, the rock wall was checked for evidence of erosion. The large tree trunks near the river mouth were still in place from the previous inspection and appeared to be minimising the effects of erosion. There was evidence of continued erosion towards the south west end of the beach (Photograph 6). Penguin footprints were present on some sections of the banks which were being used as access points to nesting areas (Photograph 7). Signs informing the public of dune replanting and erosion control were present at appropriate locations (areas of erosion) along the bank and rock wall.

8 January 2015

The camp was busy and the cabins appeared to be full during the second inspection. No odours were detected at the pump station or trenches. Water samples were taken during the inspection. The camp manager was absent.

30 January 2015

The camp was relatively quiet, with a few cabins occupied and a few people tenting. No odours were detected at the pump station or trenches. The camp manager was absent.



Photo 6 Erosion along the top of the rock wall on, a) 19 February 2014, compared with, b) on the 16 December 2014



Photo 7 Penguin access to nesting site (16 December 2014)

2.2 Results of bacteriological monitoring

A summary of historical bacteriological results from January 1993 to January 2014 is presented in Table 3. The results of the bacteriological monitoring undertaken during the 2014-2015 summer monitoring period are presented in Table 4.

	, ,			•	`	'				
	Upstre WIT000			tributary 00460	Stream a WIT0	at beach 00490	Coast SEA9		Coast SEA9	30 m S 00063
	E. coli	Ent	E. coli	Ent	E. coli	Ent	E. coli	Ent	E. coli	Ent
Number of samples	19	21	12	13	18	20	19	22	19	21
Minimum	150	130	230	100	210	130	1	0.5	0.5	0.5
Maximum	15,000	1,500	2,300	1,500	2,700	1,600	260	210	120	140
Median	470	570	665	620	690	575	7	9	7	4

 Table 3
 Summary of previous bacteriological results (cfu/100 ml) January 1993 to January 2014

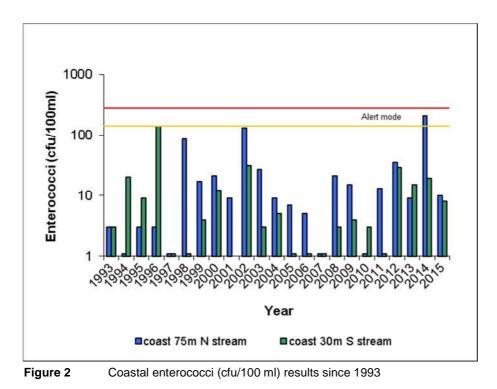
The 2015 *E. coli* counts were high at all three stream sites (Table 4). Counts at all sites were higher than historical medians and exceeded the MfE 'Action' guideline level (Tables 2, 3, 4). The *E. coli* count from the Wai-iti stream sample taken downstream of the tributary (WIT000460) exceeded the historical maximum count for that site. High counts such as these are typically associated with heavy rainfall and the resultant increase in agricultural runoff. However, the lack of precipitation prior to sampling

indicates that rainfall was not a significant factor in these results. As the counts were high at sampling sites upstream of the septic tank and sewage pump station it is unlikely that these results would be due to an unauthorised discharge of human sewage from the camp. Although the *E. coli* count is the highest at the sampling site downstream from the tributary (WIT000460), these results do not indicate that the tributary is a definite local source of faecal contamination. The differences in *E. coli* counts along the river are comparable between WIT000460 and the sites both upstream and downstream; suggesting that the differences in counts between sites may just as likely be due to natural variation at that time. However, historical medians suggest that sampling downstream from the tributary often returns high counts of *E. coli* (Table 3). Further investigation is warranted to gain a greater insight into the source of the faecal contamination. Faecal source tracking is a tool that identifies specific DNA markers within indicator bacteria to isolate whether the faecal contamination originates from human excreta, livestock effluent, or an avian source.

The 2015 enterococci counts were low at both coastal sites. These counts were within the range of previous results and did not exceed the MfE 'Alert' guideline (Tables 2, 3, 4, Figure 2). As the enterococci counts were high in the stream sampling sites, the low counts at the coastal sites are indicative of the substantial mixing and dilution where the Wai-iti Stream meets the Tasman Sea.

Site	Site code	<i>E.coli</i> (cfu/ 100 ml)	Enterococci (cfu/100 ml)	Conductivity (mS/m)
Wai-iti Stream upstream of beach camp	WIT000420	2,300	1,300	17.8
Wai-iti Stream approx. 50 m d/s of tributary	WIT000460	3,100	1,800	18.0
Wai-iti Stream adjacent beach entrance	WIT000490	2,600	1,500	18.2
Sea coast approx 75 m N of stream mouth	SEA900060	10	8	4,750
Sea coast approx 30 m S of stream mouth	SEA900063	44	24	4,700

Table 4Bacteriological monitoring, 8 January 2015



2.3 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 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 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 2014-2015 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with the Company's conditions in resource consents or provisions in Regional Plans.

3. Discussion

3.1 Discussion of site performance

The three inspections conducted during the 2014-2015 summer period at this beach camp did not indicate any problems with the sewage treatment system. No odours were noted around the septic tank and pump system or the infiltration trenches. The sewage effluent disposal system appeared to be tidy and well maintained throughout the monitoring period.

An updated contingency plan for the site was received in June 2009 and as there have been no significant changes at the site this is considered to be up-to-date.

3.2 Environmental effects of exercise of consents

The results of routine bacteriological compliance monitoring performed on 8 January 2015 showed that *E.coli* counts were high within the Wai-iti Stream (including upstream of the septic tank system) at the time of sampling. These high counts are consistent with a stream draining through developed agricultural land. However, it is becoming apparent that the influence of an unnamed tributary may be enhancing these counts. Further investigation is warranted due to the location of the soakage trenches in relation to this tributary. The 2015 enterococci counts were low at both coastal sites and did not exceed the MfE 'Alert' guideline.

Similar to last year, there was evidence of erosion around the middle and southern end of the rock rip rap, particularly at the top. The large tree trunks were still situated near the stream mouth and seemed to be offering a degree of protection for the banks behind them. The signs were still in place at appropriate positions to inform the public about the dune restoration and coastal erosion.

3.3 Evaluation of performance

A summary of the Wai-iti Motor Camp's compliance record for the year under review is set out in Tables 5 and 6.

Pu	Purpose: To discharge up to 27 cubic metres/day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Wai-iti Stream					
Со	ndition requirement	Means of monitoring during period under review	Compliance achieved?			
 Bacteriological sampling to be undertaken in the Wai-iti Stream and the coastal waters 		Council's bacteriological sampling at five sites	Yes			
2.	Consent holder to ensure maintenance of septic tanks, pumps and soakage trenches is undertaken	Site inspections	Yes			

 Table 5
 Summary of performance for Consent 1971-3

Pu	Purpose: To discharge up to 27 cubic metres/day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Wai-iti Stream				
Co	ndition requirement	Compliance achieved?			
3.	Consent holder to provide records of daily effluent volumes discharged to the soakage trenches	Records not requested	N/A		
4.	Contingency plan to be provided	An updated contingency plan received June 2009	Yes		
5.	Optional review provision re environmental effects	N/A			
CO	erall assessment of consent compliance nsent erall assessment of administrative perform	High High			

N/A = not applicable

Table 6	Summary o	f performance	for Consent 6462-1
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Purpose: To erect, place and maintain a boulder rip rap toe protection in the coastal marine area on the Wai-iti Beach foreshore				
Condition requirement		Means of monitoring during period under review	Compliance achieved?	
1.	Notification period before construction or maintenance begins		N/A	
2.	Structure to be constructed and maintained in accordance with the engineering plans	Site inspections	Yes	
3.	Landward position of seawall is to be determined by survey to satisfaction of Council		N/A	
4.	Crest of structure to be no higher than reduced level plus 7.5m	Site inspections	Yes	
5.	Maximum size of boulders to be used	Site inspections	Yes	
6.	Structure to have minimum slope of 2 to 1	Site inspections	Yes	
7.	No refuelling of machinery within coastal marine area		N/A	
8.	Construction to comply with noise standards as defined in the coastal plan		N/A	
9.	No work to be undertaken during weekends and holiday periods		N/A	

Overall assessment of consent compliance Overall assessment of administrative perform	High High	
19. Optional review provision re environmental effects	Not required	N/A
18. Structure to be removed and reinstated if no longer required		N/A
17. Annual monitoring programme to be developed for integrity of the wall	An annual inspection is incorporated with the monitoring for the wastewater treatment system at the Wai-iti Beach Camp. Further monitoring (structure survey) may be required in future	Yes
16. Area behind rock wall to be planted in sand binding plants	Grasses planted	Yes
15. Structure to be constructed within 12 months of issuing of consent		Yes
14. Works to cease if any archaeological remains are found		N/A
13. Area and volume of disturbance to be minimised and reinstated	Site inspections	Yes
12. In situ beach materials only to be used for foreshore reinstatement purposes		N/A
11. Sufficient signage to be in place during construction		N/A
10. No maintenance to be undertaken during weekends or the summer holiday period	No maintenance work has had to be undertaken as yet	N/A

During the year, the Wai-iti Motor Camp demonstrated a high level of environmental and administrative performance and compliance with its resource consents (1971-3 and 6462-1). During the year under review there were no unauthorised incidents reported in relation to the motor camp. No adverse environmental effects were observed as a result of the Wai-iti Beach Motor Camp wastewater system or rock revetment structure.

3.4 Recommendations from the 2013-2014 Annual Report

In the 2013-2014 Annual Report, it was recommended:

- 1. THAT monitoring of the sewage discharge system at the Wai-iti Motor Camp in the 2014-2015 year continues at the same level as in 2013-2014.
- 2. THAT in conjunction with the sewage discharge inspection one inspection is undertaken of the rock wall to assess the integrity of the structure, end effects and any erosion occurring as a result of the rock wall.

3. THAT should monitoring results indicate problems with the sewage treatment systems, extended monitoring of Wai-iti Stream and coastal water quality shall be undertaken.

These recommendations were implemented.

3.5 Alterations to monitoring programmes for 2015-2016

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 the obligations of the Act in terms of monitoring emissions/discharges and effects, and subsequently 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 emitting to the atmosphere/discharging to the environment.

In the case of the Wai-iti Motor Camp Limited wastewater system, the programme for 2014-2015 was unchanged from that for 2013-2014. Similarly, it is proposed that for the 2015-2016 period that the routine monitoring programme continues at this level. However, due to the results presented in this report, it is also proposed for the 2015-2016 period that faecal source tracking is employed in addition to the routine monitoring programme. This additional component is proposed solely for the purpose of discovering the source of faecal contamination in the Wai-iti stream and is not intended to be a permanent alteration to the monitoring programme. A recommendation to this effect is attached to this report.

3.6 Exercise of optional review of consent

Resource consent 1971-3 provides for an optional review of the consent in June 2015. Special condition 5 allows the Council to review the consent, if there are grounds that the current conditions are inadequate to deal with any adverse effects on the environment arising from the exercise of this resource consent.

Resource consent 6462-1 provides for an optional review of the consent in June 2015. Special condition 19 allows the Council to review the consent, if there are grounds that the current conditions are inadequate to deal with any adverse effects on the environment arising from the exercise of this resource consent.

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

4. Recommendations

- 1. THAT routine monitoring of the sewage discharge system at the Wai-iti Motor Camp in the 2015-2016 year continues at the same level as in 2014-2015.
- 2. THAT in conjunction with the sewage discharge inspection one inspection is undertaken of the rock wall to assess the integrity of the structure, end effects and any erosion occurring as a result of the rock wall.
- 3. THAT should monitoring results indicate problems with the sewage treatment systems, extended monitoring of Wai-iti Stream and coastal water quality shall be undertaken.
- 4. THAT faecal source tracking technology is employed in the 2015-2016 monitoring period in addition to the routine monitoring programme in order to distinguish the source of faecal contamination.

Glossary of common terms and abbreviations

The following abbreviations and terms are used within this report:

'Action' mode	Marine: two consecutive single samples > 280 enterococci/100ml
	Freshwater: single sample >550 E. coli/100ml
'Alert' mode	Marine: single sample 141-280 enterococci/100ml
	Freshwater: single sample 261-550 <i>E. coli</i> /100ml
Bacteriological	Micro-organisms selected as indicators of faecal material indicators
Bathers	Those who enter the water, and either partially or fully immerse themselves
Bathing season	Generally the bathing season extends between 1 November and 31 March
Beach	The shore or any access point to the sea
cfu	colony forming units. A measure of the concentration of bacteria usually expressed as per 100 ml sample
Conductivity	An indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m
Contact recreation	Recreation activities that bring people physically in contact with water, involving a risk of involuntary ingestion or inhalation of water
Enterococci	An indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 ml of sample
Faecal coliforms	An indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 ml sample
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
Investigation	reduce the likelihood of an incident occurring action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident
IR	Unauthorised 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
Median	Central value when values are arranged in order of magnitude
Resource consent	refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15)

RMA	Resource Management Act 1991 and subsequent amendments
Temperature	Measured in °C (degrees Celsius)
UI	Unauthorised Incident
Water quality	The bacteriological condition of a water body as it relates to human
	health, measured using indicator bacteria

For further information on analytical methods, contact the Council's laboratory.

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Appendix I

Resource consents held by Wai-iti Motor Camp



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

CHIEF EXECUTIVE PRIVATE BAG 713 47 CLOTEN ROAD STRATFORD NEW ZEALAND PHONE: 06-765 7127 FAX: 06-765 5097 www.trc.govt.nz

Please quote our file number on all correspondence

Name of Consent Holder: Wai-iti Motor Camp Limited 538 Carrington Road R D 1 New PLYMOUTH

New Address:

P O Box 845 New Plymouth 4340

Consent Granted Date:

12 July 2005

Conditions of Consent

- Consent Granted: To erect, place and maintain a boulder rip rap toe protection in the coastal marine area on the Wai-iti Beach foreshore at or about GR: Q18:379-523
- Expiry Date: 1 June 2021
- Review Date(s): June 2009, June 2015
- Site Location: Beach Road, Urenui
- Legal Description: Pt Lot 2 DP 13368 Blk X Mimi SD
- Catchment: Tasman Sea

For General, Standard and Special conditions pertaining to this consent please see reverse side of this document www.trc.govt.nz

Working with people • Caring for our environment

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 Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to commencement, and upon completion of initial construction, and again at least 48 hours prior to, and upon completion of, any subsequent maintenance works.
- 2. The structure authorised by this consent shall be constructed and subsequently maintained in accordance with the engineering plans submitted in support of application 3319 and to ensure the conditions of this consent are met. Any variation to these plans will be subject to the approval of the Chief Executive, Taranaki Regional Council. In the case of any contradiction between the documentation submitted in support of application 3319 and the conditions of this consent, the conditions of this consent shall prevail.
- 3. The landward position of the seawall is determined by survey to the satisfaction of the Chief Executive, Taranaki Regional Council prior to the commencement of works.
- 4. The crest of the structure shall not exceed a maximum height of reduced level plus 7.5 metres.
- 5. The maximum diameter of boulders utilised within the structure shall be no more than 0.8 metres.
- 6. The structure shall have a minimum seaward slope of 2 horizontal to 1 vertical.
- 7. There shall be no refuelling of construction machinery within the coastal marine area.

- 8. The construction, use, maintenance and removal of the structure authorised by this consent shall comply with the noise standards as outlined within section 4.4.3 of the Regional Coastal Plan for Taranaki.
- 9. During construction of the structure no work shall be undertaken during school holidays, public holidays and weekends without the approval of the Chief Executive, Taranaki Regional Council.
- 10. All practicable measures shall be undertaken to ensure maintenance of the structure shall not occur on weekends, public holidays or between 1 December and 31 January.
- 11. During construction and maintenance periods the area subject to works shall have sufficient signage to ensure public safety of any potential safety hazards.
- 12. In situ beach material shall be used only for foreshore reinstatement purposes seaward of the structure, and shall not be used for construction purposes.
- 13. The consent holder shall ensure that the area and volume of foreshore disturbance shall, so far as practicable, be minimised and any areas which are disturbed shall, so far as practicable, be reinstated.
- 14. In the event that any archaeological remains are discovered as a result of the exercise of this consent, the works shall cease immediately at the affected site. The Ngati Mutunga Iwi Authority and the Chief Executive of the Taranaki Regional Council shall be notified immediately, and be invited to inspect the site.
- 15. The structure authorised by this consent shall be constructed within twelve months of the granting of this consent. Upon completion of construction the consent holder shall submit as built plans of the structure if different to those submitted in support of application 3319.
- 16. The consent holder shall undertake all practicable measures to ensure the development of healthy functioning flax, spinefex and other native sand binding plants immediately behind the rock revetment wall to the satisfaction of the Chief Executive, Taranaki Regional Council.
- 17. An annual monitoring programme will be developed for the integrity of the rock wall, erosion of the beach and for any end effects of the surrounding environment. All costs associated with the monitoring will be met by the consent holder.
- 18. The structure authorised by this consent shall be removed and the area reinstated, if and when the structure is no longer required. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to the structures removal and reinstatement.

Consent 6462-1

19. 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.

Footnote:

i. The structure is proposed to be constructed on New Plymouth District Council esplanade reserve. The New Plymouth District Council takes no responsibility for the maintenance of the structure or effects it might have on the beach or neighbouring properties.

Signed at Stratford on 12 July 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**

PRIVATE BAG 713 47 CLOTEN ROAD STRATFORD NEW ZEALAND PHONE 06-765 7127 FAX 06-765 5097

Please quote our file number on all correspondence

Wai-iti Motor Camp Limited **Consent Holder:** C/- 538 Carrington Road RD1 New Address: **NEW PLYMOUTH**

28 March 2003

P O Box 845 New Plymouth 4340

Consent Granted Date:

Name of

Conditions of Consent

Consent Granted: To discharge up to 27 cubic metres/day of septic tank treated sewage effluent via soakage trenches to groundwater in the vicinity of the Waiiti Stream at or about GR: Q18:379-523

Expiry Date: 1 June 2021

June 2009, June 2015 Review Date(s):

Site Location: Beach Road, Waiiti

Legal Description: Pt Lot 2 DP 13368 Waiiti 54B3 54B2 Blk X Mimi SD

Catchment: Waiiti

> For General, Standard and Special conditions pertaining to this consent please see reverse side of this document www.trc.govt.nz



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, in conjunction with the Taranaki Regional Council, undertake such bacteriological monitoring of the Waiiti Stream and coastal waters of the foreshore as deemed necessary by the Chief Executive, Taranaki Regional Council.
- 2. The consent holder shall ensure proper maintenance of the septic tanks, pumping station and soakage trenches as required.
- 3. The consent holder shall provide records of daily effluent volumes discharged to the soakage trenches at the request of the Chief Executive, Taranaki Regional Council.
- 4. The consent holder shall provide a contingency plan to the satisfaction of the Chief Executive, Taranaki Regional Council, outlining measures to be undertaken in the event of power failure, pump breakdown, pipe blockage and failure of soakage trenches, within three months of granting this consent.
- 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 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.

Transferred at Stratford on 5 December 2003

For and on behalf of Taranaki Regional Council

Chief Executive