Urenui and Onaero Beach Camps Monitoring Programme Annual Report 2018-2019

Technical Report 2019-09

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Executive summary

New Plymouth District Council (NPDC) operates the sewage disposal systems located at Urenui Beach Camp and Onaero Bay Holiday Park. NPDC holds resource consents to allow it to discharge septic tank treated sewage to groundwater via infiltration trenches at each of the beach camps. This report for the period July 2018 to June 2019 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess NPDC's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the NPDC's activities.

NPDC holds one resource consent per beach camp, which each include a total of five special conditions setting out the requirements that NPDC must satisfy.

During the monitoring period, NPDC demonstrated an overall good level of environmental performance.

The Council's monitoring programme for the year under review included three inspections per beach camp. One of these inspections included routine bacteriological sampling at four sites at Urenui and five sites at Onaero.

The monitoring showed that the wastewater treatment systems at the beach camps did not adversely affect the water quality of the local freshwater and coastal environments. Although high bacteriological results were returned from the water quality sampling efforts, these counts were attributed to surface runoff draining the upstream agricultural catchment, following the rains that preceded the sampling.

There was one Unauthorised Incident recording non-compliance in respect of NPDC during the period under review. A soakage trench at Urenui Beach Camp's sewerage system was found to have saturated and to be discharging sewage onto land in February 2019, resulting in an abatement notice being issued. The unauthorised discharge was caused by the disposal effluent lines having been rotated too infrequently over the busy summer period. The issue was immediately investigated and resolved by NPDC, and no environmental effects were detected. By comparison with previous years, the monitoring indicated a decline in NPDC's environmental performance due to this incident.

During the year, NPDC demonstrated a good level of environmental performance and high level of administrative performance with regard to the resource consent for the Urenui Beach Camp (2046-3). This rating was influenced by the occurrence of the Unauthorised Incident. NPDC demonstrated high levels of environmental and administrative performance with the resource consent for the Onaero Bay Holiday Park (1389-3). During the year under review NPDC demonstrated an overall good level of environmental performance.

For reference, in the 2018-2019 year, consent holders were found to achieve a high level of environmental performance and compliance for 83% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 13% of the consents, a good level of environmental performance and compliance was achieved.

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

This report includes recommendations for the 2019-2020 year.

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1 Introduction

1.1 Compliance monitoring programme reports and the Resource Management Act 1991

1.1.1 Introduction

This report is for the period July 2018 to June 2019 by the Taranaki Regional Council (the Council) describing the monitoring programme associated with resource consents held by New Plymouth District Council (NPDC) for the disposal of treated sewage at the Urenui Beach Camp and Onaero Bay Holiday Park. NPDC operates the wastewater treatment systems at each of the beach camps.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by NPDC that relate to discharges of septic tank treated sewage effluent to groundwater via soakage trenches. This is the 29th report to be prepared by the Council to cover NPDC's water 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 *Resource Management Act 1991* (RMA) and the Council's obligations;
- the Council's approach to monitoring sites though annual programmes;
- the resource consents held by NPDC for the two beach camps;
- the nature of the monitoring programme in place for the period under review; and
- a description of the activities and operations conducted at the two beach camps.

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 2019-2020 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 NPDC, 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 NPDC's approach to demonstrating consent compliance in site operations and management including the timely provision of information to Council (such as contingency plans and water take data) in accordance with consent conditions.

Events that were beyond the control of the consent holder 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 2018-2019 year, consent holders were found to achieve a high level of environmental performance and compliance for 83% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 13% of the consents, a good level of environmental performance and compliance was achieved.[1]

1.2 Process description

1.2.1 Urenui Beach Camp

The current sewage disposal system at Urenui Beach Camp has been in use since 1987. Prior to this, septic tank waste was pumped to a nearby cliff top and discharged to the sea below. This was found to be unsatisfactory, as the septic tank retention time was about 21 hours during the peak summer usage period, resulting in inadequate treatment of sewage.

With the current disposal system, the waste from the campsite receives primary treatment through a septic tank system and is then pumped to groundwater via soakage trenches located approximately 50 m from the edge of the cliff, to the northeast of the camp and golf course.

[1] The Council has used these compliance grading criteria for 15 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018

Photo 1 Urenui estuary and beach camp

1.2.2 Onaero Bay Holiday Park

The current sewage disposal system at the Onaero Bay Holiday Park has been in use since 1984. Prior to this, waste was collected in septic tanks and the overflow gravitated to a small pumping station on the northern side of the Onaero River. The septic tank waste was then pumped to the top of a nearby ridge and into a soakage pit (approximately 4x2x3 m). This was found to be unsatisfactory during the peak summer usage period, resulting in inadequate treatment of sewage.

The current disposal system treats waste from the campsite in a similar manner to the Urenui Beach Camp's wastewater treatment system. Waste receives primary treatment through a septic tank system and is then pumped to soakage trenches located on high ground, approximately 300 m away.

1.3 Resource consents

NPDC holds two resource consents, the details of which are summarised in the table below. Summaries of the conditions attached to each permit are set out in Section 3 of this report.

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

Table 1 Resource consents held by NPDC, in relation to treated septic tank effluent discharges into groundwater, at the Urenui Beach Camp and Onaero Bay Holiday Park

Consent number	Purpose	Granted	Review	Expires
Water discharge permits				
2046-3	To discharge treated septic tank sewage effluent via soakage trenches into groundwater in the vicinity of the Urenui River	6 December 2002	June 2015	1 June 2021
1389-3	To discharge treated septic tank effluent via soakage trenches into groundwater in the vicinity of the Onaero River	6 December 2002	June 2015	1 June 2021

1.4 Monitoring programme

1.4.1 Introduction

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

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

The monitoring programme for the Urenui and Onaero beach camps 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 consent reviews, renewals or new consent applications;
- advice on the Council's environmental management strategies and content of regional plans; and
- consultation on associated matters.

1.4.3 Site inspections

The Urenui Beach Camp and Onaero Bay Holiday Park were both visited three times during the monitoring period. With regard to consents for the discharge to water, the main points of interest were plant processes with potential or actual discharges to receiving watercourses. Air inspections focused on site processes with associated actual and potential emission sources and characteristics, including potential odour, dust, noxious or offensive emissions. The neighbourhood was surveyed for environmental effects.

1.4.4 Bacteriological sampling

1.4.4.1 Urenui Beach Camp

The Council undertook bacteriological sampling in conjunction with the first post-Christmas inspections in January 2019.

Samples were collected at four sites in conjunction with the Urenui Beach Camp: two river and two coastal sites (Photo 2). A description of each site is provided in Table 2, and the locations of the four sampling sites are shown in Figure 1. The bridge on State Highway 3 (Site 1) was previously used as the upstream sampling site. An alternative site, 1 km downstream at the footbridge (Site 1a), has been used since 2001 as Site 1 is no longer safe to sample from.

Table 2 Locations of bacteriological sampling sites at Urenui Beach Camp in 2018-2019

Site	Location	Site code	GPS coordinates (NZTM)
1	Urenui River SH3 bridge	URN000420	1721404 - 5682968
1a	Urenui River footbridge	URN000440	1720608 - 5682914
2	Urenui River at mouth	URN000480	1720245 - 5683370

Site	Location	Site code	GPS coordinates (NZTM)
3	Sea coast approx. 200 m east of river mouth	SEA900072	1720582 - 5683563
4	Sea coast at east end of beach	SEA900070	1720803 - 5683667

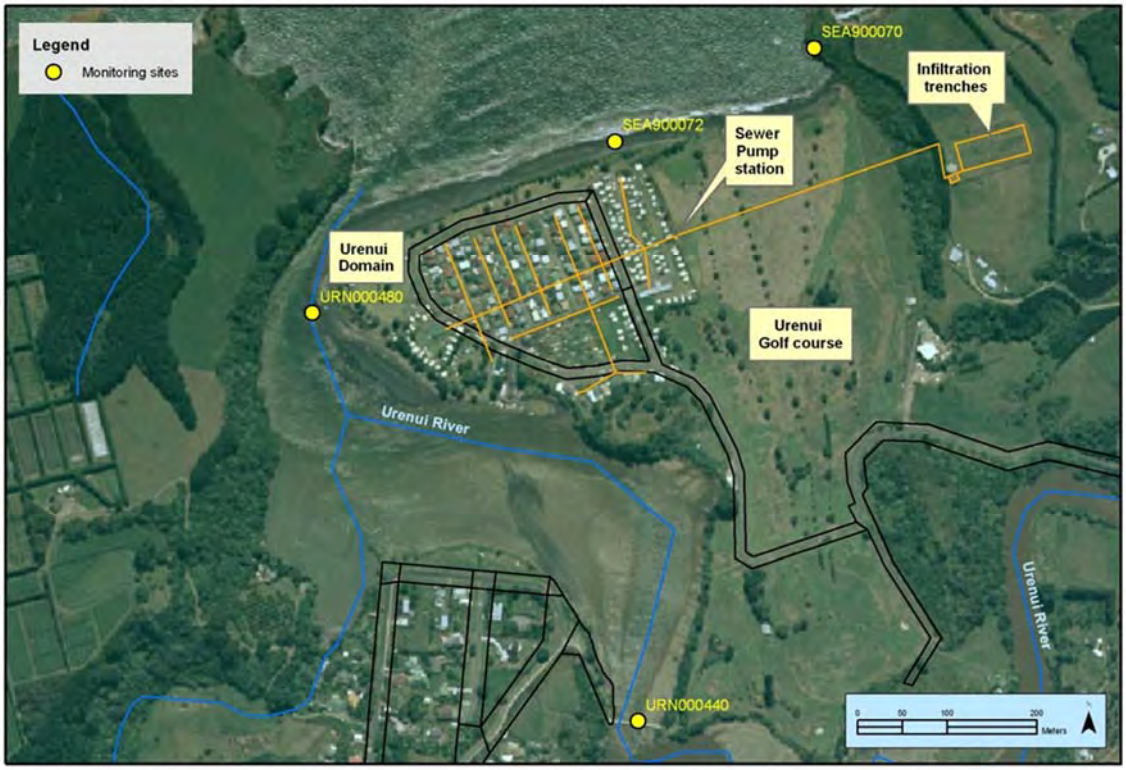

Figure 1 Map of sampling sites, sewage disposal system and other features of interest at Urenui Beach Camp

Photo 2 Urenui Beach, December 2017

1.4.4.2 Onaero Bay Holiday Park

Samples were collected at five routinely monitored sites in conjunction with the Onaero Bay Holiday Park, two river and three coastal sites (Photo 3). A description of each site monitored in the 2018-2019 monitoring period is provided in Table 3, and the locations of the five routinely monitored sampling sites are shown in Figure 2. As recommended in the 2017-2018 report, the additional monitoring that had been carried out in the Onaero River during the past three monitoring periods was discontinued, due to insufficient evidence to suggest that the beach camp's pump station was affecting the water quality of the Onaero River.

Table 3 Locations of bacteriological sampling sites at Onaero Bay Holiday Park in 2018-2019

Site	Location	Site code	GPS coordinates (NZTM)
1	Onaero River SH3 bridge	ONR000450	1718296 - 5682687
2	Onaero River at domain pump station bridge	ONR000470	1718283 - 5682895
3	Sea coast on beach adjacent to surf club	SEA900085	1718158 - 5683163
4	Sea coast beneath sewage infiltration cliff	SEA900083	1718216 - 5683212
5	Sea coast north of sewage infiltration cliff	SEA900081	1718296 - 5683239

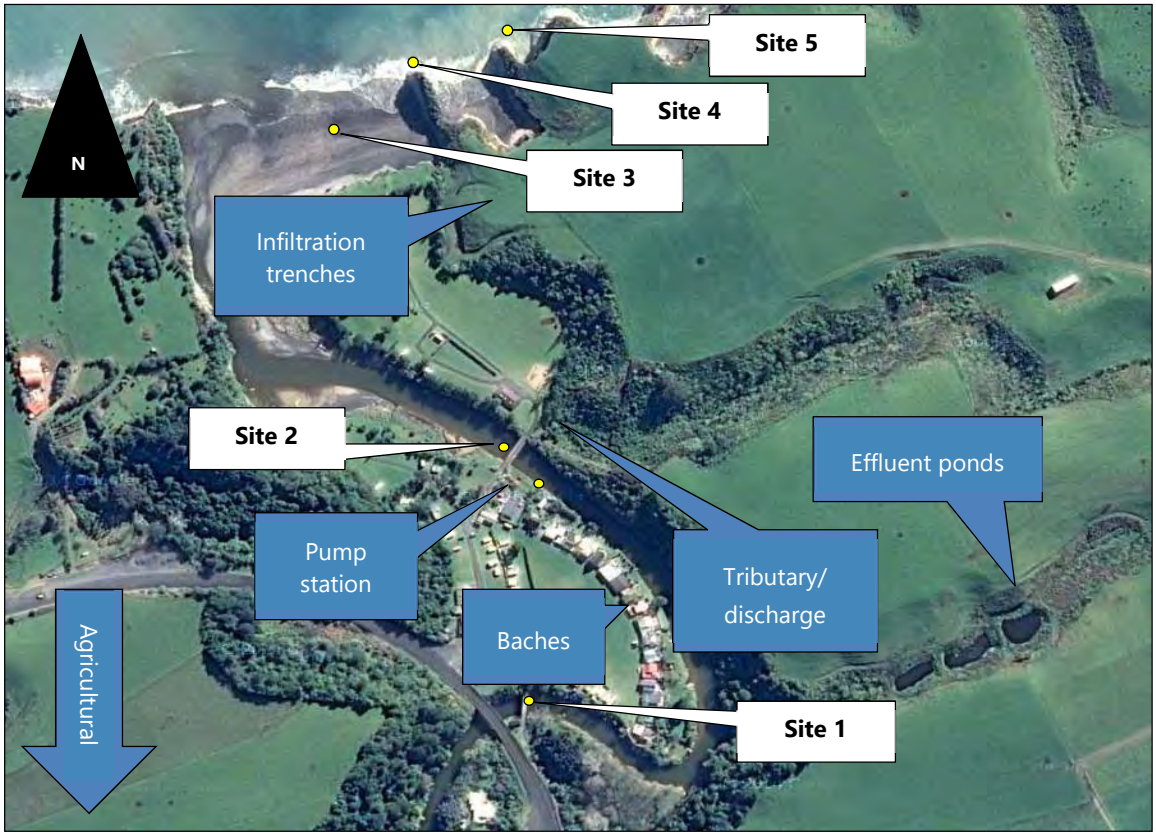

Figure 2 Map of sampling sites, sewage disposal system and other features of interest at Onaero Bay Holiday Park

Photo 3 Onaero Beach, May 2015

Samples were analysed for temperature, conductivity and the faecal indicator bacteria (FIB), enterococci and *Escherichia coli* (*E. coli*). The FIB were monitored to provide an indication of potential contamination of the water by animal and/or human excreta. Electrical conductivity, which reflects the total ionic content of water, was measured as a supporting variable; conductivity indirectly relates to water composition as it correlates well with total dissolved solid concentrations (Davies-Colley, 2013).

Water quality at these sites is of particular interest as the beaches and rivers around the Urenui Beach Camp and Onaero Bay Holiday Park are popular summer swimming areas. 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 these bacteria have the ability to survive in marine water, providing the closest correlation with health effects in New Zealand coastal waters (MfE, 2003). For freshwater, the MfE (2003) guidelines use *E. coli* as the preferred indicator (Table 4). 'Alert' and 'Action' guideline levels are summarised in Table 4 and are based on keeping illness risk associated with recreational use to less than approximately 2%.

Table 4 Recreational bathing guidelines (MfE, 2003)

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

In addition to water quality monitoring during inspections, bacteriological samples were also collected from in front of the Onaero Surf Club (SEA900085) as part of the Council's State of Environment Monitoring Programme during the 2018-2019 monitoring period. Results from this programme are available in the Council's 2018-2019 Bathing Beach Water Quality State of the Environment Monitoring Report (TRC, 2019).

2 Results

2.1 Urenui Beach Camp

2.1.1 Inspections

6 December 2018

Conditions were overcast at the time of the inspection, with a light rain occurring. The camp manager reported that approximately 30 campers were present on site, and that the camp was expected to get busier after Christmas. There had been no issues with the wastewater treatment system on the camp side of the pump station since the previous inspection. No odours or visual issues were detected at the pump station. City Care Water was carrying out a routine check of the pump station during the inspection, and reported that the wastewater treatment system was being inspected weekly. The insides of the wet well and electric board were viewed, and appeared to be well maintained.

The sea wall was also inspected on this occasion. Although some erosion was evident behind the seawall, the dunes and dune grasses appeared to be mostly stable.

14 January 2019

Weather conditions were overcast and fine during the inspection. The camp was moderately busy at the time of inspection, with approximately 500 campers present on site. The camp manager reported that the beach camp's wastewater treatment system had been operating without issue over summer and had been regularly maintained. No visual issues or odours were detected at the pump station during the inspection.

Water samples were collected during the inspection.

1 February 2019

Conditions were overcast with no wind. The camp was moderately busy at the time of inspection. The camp manager reported that approximately 200 campers were present on site, considerably less than the occupancy over the peak period. No visual issues or odours were detected at the pump station. The camp manager reported that there had been no issues with the beach camp's wastewater treatment system over the busy season.

2.1.2 Results of receiving environment monitoring

FIB have been sampled at the Urenui Beach Camp since 1987. A summary of historical bacteriological results from 1987 to 2018 is provided in Table 5. Median results indicate that FIB levels are typically lower at the river mouth than further upstream. This is likely due to a mixing effect at the river mouth, where seawater containing very low levels of FIB intrudes into the estuarine environment and dilutes the higher FIB counts of the riverine water. This is supported by a higher median electrical conductivity level at the river mouth than at the upstream site, due to the high ionic content and therefore electrical conductivity of seawater. These higher FIB counts are typically not reflected at the coastal sites, where even more mixing and dilution occurs where the river meets the Tasman Sea.

Table 5 Summary of previous bacteriological results, with *E. coli* measured in MPN/100 ml, enterococci (Ent) in cfu/100 ml, and electrical conductivity (EC) in mS/m@20ºC, for Urenui Beach Camp (1993-2018)

	Site 1/1a		Site 2		Site 3		Site 4	
	E. coli	**EC**	***E. coli***	**EC**	**Ent**	**EC**	**Ent**	**EC**
Number of samples	23	25	23	25	26	25	26	25
Median	300	1,220	120	2,710	20	3,680	18	4,130
Minimum	8	192	4	144	0.5	1,560	1	1,480
Maximum	3,300	4,740	2,100	4,750	250	4,750	400	4,760

The results of the routine bacteriological monitoring undertaken during the 2018-2019 summer monitoring period are presented in Table 6. The *E. coli* counts recorded at the river mouth and at the footbridge located further upstream were both well above the respective historical medians and the MfE 'Action' level for freshwater (Table 4). As with the historical medians, the FIB and electrical conductivity values recorded at the river mouth were respectively less than and greater than the values recorded at the footbridge, indicating that the beach camp did not influence the water quality of the Urenui River. The FIB counts were considerably lower at the coastal sites, although still above the MfE 'Action' level for marine waters (Table 4). These elevated results were most likely influenced by surface runoff from further upstream, following recent rainfall.

Table 6 Bacteriological results for Urenui Beach Camp (14 January 2019)

Parameter	Unit	Site 1a	Site 2	Site 3	Site 4
Electrical conductivity	mS/m@20°C	3,180	3,980	4,220	4,530
E. coli	MPN/100 ml	2,420	1,203	-	-
Enterococci	cfu/100 ml	-	-	700	900

2.2 Onaero Bay Holiday Park

2.2.1 Inspections

6 December 2018

Conditions were overcast with light rainfall during the inspection. The camp manager was not present at the time of the inspection, and the camp appeared to be quiet.

City Care Water was carrying out a routine check of the pump station during the inspection, and reported that the wastewater system was being inspected weekly. No visual issues were noted, or offensive odours detected, during the inspection. The insides of the wet well and electric board were viewed, and appeared to be well maintained.

14 January 2019

Weather conditions were overcast and fine during the inspection. A camp staff member was present at the time of the inspection and reported that approximately 110 campers were present on site. The camp was at normal occupancy, and had been relatively quiet leading up to the inspection. There had been no issues with the wastewater treatment system over the busy period, and the pump station filter was replaced two

weeks prior to the inspection. No visual issues were noted, or offensive odours detected, during the inspection.

Water samples were collected on this occasion.

1 February 2019

The weather was overcast and fine, with no wind, during the site inspection. The camp manager was not present at the time of the inspection. The camp appeared to be quiet, with approximately 15 camping groups present. No odours or other issues were noted during the inspection.

2.2.2 Results of receiving environment monitoring

FIB have been sampled for at the Onaero Bay Holiday Park since 1987. A summary of historical bacteriological results from 1987 to 2018 is presented in Table 7.

Median results indicate that FIB levels and conductivity are typically higher at the bridge below the beach camp's pump station, compared with the upstream sample. These higher FIB counts are typically not reflected at the coastal sites, where extensive mixing and dilution occurs where the river meets the Tasman Sea.

Table 7 Summary of previous bacteriological results, with *E. coli* measured in MPN/100 ml, enterococci (Ent) in cfu/100 ml, and electrical conductivity (condy) in mS/m@20ºC, for Onaero Bay Holiday Park (1993-2018)

	Site 1		Site 2		Site 3		Site 4		Site 5	
	E. coli	**Condy**	***E. coli***	**Condy**	**Ent**	**Condy**	**Ent**	**Condy**	**Ent**	**Condy**
Number of samples	24	26	25	27	26	25	26	25	22	21
Median	454	104	590	178	79	4,130	34	4,340	33	4,450
Minimum	77	10	69	11	1	757	3	603	1	2,280
Maximum	2,400	2,000	2,000	4,680	1,100	4,740	1,200	4,710	1,000	4,680

Table 8 shows the results of the bacteriological monitoring undertaken during the 2018-2019 monitoring year at the five sampling sites. The *E. coli* counts recorded at the two routinely monitored riverine sites exceeded the MfE 'Action' level for freshwater (Table 4). However, these elevated counts were most likely due to surface runoff draining the agricultural catchment further upstream, following the rainfall event preceding sampling. Enterococci counts at the coastal sites were above the historical maximums, exceeding the MfE 'Action' level for marine waters (Table 4). The relatively higher enterococci result and lower electrical conductivity value recorded at Site 3, compared with Sites 4 and 5, suggests that the elevated FIB levels in the Onaero River had decreasing effects on coastal water quality, with increasing distance from the river mouth. The results of this sampling run provided no evidence to suggest that the pump station or soakage trenches were affecting the water quality of local water bodies.

Table 8 Bacteriological results for Onaero Bay Holiday Park (14 January 2019)

Parameter	Unit	Site 1	Site 2	Site 3	Site 4	Site 5
Electrical conductivity	mS/m@20°C	611	98.6	1,316	4,040	4,440
E. coli	MPN/100 ml	> 2,420	> 2,420	-	-	-
Enterococci	cfu/100 ml	-	-	4,000	1,900	1,100

2.3 Incidents, investigations, and interventions

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with NPDC. During the year matters may arise which require additional activity by the Council, for example provision of advice and information, or investigation of potential or actual causes of non-compliance or failure to maintain good practices. A pro-active approach, that in the first instance avoids issues occurring, is favoured.

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

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

Table 9 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to NPDC's activities during the 2018-2019 period. This table presents details of all events that required further investigation or intervention regardless of whether these were found to be compliant or not.

Table 9 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
18/02/2019	Complaint was received regarding a soakage trench at the Urenui Beach sewerage system discharging sewage onto land at Beach Road, Urenui.	N	Abatement notice	Disposal effluent line switched over, and frequency of switching over lines increased.

3 Discussion

3.1 Discussion of site performance

3.1.1 Urenui Beach Camp

No visual issues or offensive odours were noted during any of the three inspections, and no issues with the wastewater treatment system were reported by the camp manager over the 2018-2019 monitoring period. However, on 18 February 2019 a complaint was received by the Council from a member of the public regarding a soakage trench at the beach camp's sewerage system discharging sewage onto land. An abatement notice was issued by the Council and the issue was promptly rectified by NPDC. City Care Water, the Council's contractor, responded immediately and switched over the disposal effluent lines. The frequency of switching over the effluent lines was also increased from a six monthly to three monthly cycle. A follow-up inspection by the Council on 26 February 2019 found NPDC to be complying with abatement notice EAC 22527, with no evidence of effluent at the surface of the soakage trenches.

3.1.2 Onaero Bay Holiday Park

No major issues were identified over the busy period. The camp manager reported at the end of the monitoring period that odours had been present for a few days over the peak season, and that replacing the pump station filter had resolved this issue. No odours or visual issues were noted at the pump station during the Council's summer inspections.

3.2 Environmental effects of exercise of consents

Water quality monitoring was undertaken in the Urenui River, Onaero River and adjacent coastal waters during the period under review. The samples did not detect any adverse effects caused by the beach camps' sewerage systems. It appeared that the elevated FIB levels detected during the summer sampling were the result of upstream effects, most likely surface runoff entering the waterways following the rain event preceding sampling.

3.3 Evaluation of performance

A tabular summary of NPDC's compliance record for the year under review is provided in Tables 10 and 11.

Table 12 sets out a summary of environmental performance by NPDC over time.

Table 10 Summary of performance for consent 2046-3

Purpose: ***To discharge treated septic tank effluent in the vicinity of the Urenui River***		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Bacteriological monitoring of Urenui River and coastal foreshore	Sample collection	Yes
2. Consent holder to maintain septic tank system as required	Complaint from member of public received – see Section 3.1.1 and abatement notice EAC 22527	**No**
3. Records of daily effluent volumes if requested	Not requested during period under review	N/A
4. Contingency plan	NPDC Water & Wastes Incident Response Plan version 10.3, received September 2017	Yes

Purpose: *To discharge treated septic tank effluent in the vicinity of the Urenui River*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
5. Optional review provision re. environmental effects	No further provisions for review; expires 1 June 2021	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**Good** **High**

N/A = not applicable

Table 11 Summary of performance for consent 1389-3

Purpose: *To discharge septic tank sewage effluent at Onaero*		
Condition requirement	**Means of monitoring during period under review**	**Compliance achieved?**
1. Bacteriological monitoring of Onaero River and coastal foreshore	Sample collection	Yes
2. Consent holder to maintain septic tank system as required	Site inspections, liaison with camp management	Yes
3. Records of daily effluent volumes if requested	Not requested during period under review	N/A
4. Contingency plan	NPDC Water & Wastes Incident Response Plan version 10.3, received September 2017	Yes
5. Optional review provision re environmental effects	No further provisions for review; expires 1 June 2021	N/A
Overall assessment of consent compliance and environmental performance in respect of this consent Overall assessment of administrative performance in respect of this consent		**High** **High**

N/A = not applicable

Table 12 Evaluation of environmental performance over time

Year	Consent no	High	Good	Improvement req	Poor
2010-2011	2046	1	-	-	-
	1389	1	-	-	-
2011-2012	2046	1	-	-	-
	1389	1	-	-	-
2012-2014	2046	1	-	-	-
	1389	-	-	1	-
2014-2015	2046	1	-	-	-
	1389	1	-	-	-
2015-2016	2046	1	-	-	-

Year	Consent no	High	Good	Improvement req	Poor
	1389	1	-	-	-
2016-2017	2046	1	-	-	-
	1389	1	-	-	-
2017-2018	2046	1	-	-	-
	1389	1	-	-	-
2018-2019	2046	-	1	-	-
	1389	1	-	-	-
Total	2046	7	1	0	0
	1389	7	0	1	0

During the year, NPDC demonstrated a good level of environmental and high level of administrative performance with the resource consents as defined in Section 1.1.4. By comparison with previous years, the monitoring indicated a decline in environmental performance. There was one Unauthorised Incident recording non-compliance in respect of consent 2046-3 during the period under review. An abatement notice was issued as a soakage trench at the beach camp's sewerage system was found to be discharging sewage onto land in February 2019; the issue was resolved immediately and no environmental effects were detected.

3.4 Recommendations from the 2017-2018 Annual Report

In the 2017-2018 Annual Report, it was recommended:

1. THAT monitoring of discharges from Urenui Beach Camp in the 2018-2019 year continues at the same level as in 2017-2018.
2. THAT the additional monitoring carried out in the Onaero River during the past three monitoring periods is discontinued, due to insufficient evidence to suggest that the camp's pump station is affecting the water quality of the Onaero River.

These recommendations were implemented in full.

3.5 Alterations to monitoring programmes for 2019-2020

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

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

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

It is proposed that for 2019-2020, the soakage trenches at the beach camps are inspected during routine site inspections, to check for any evidence of effluent ponding at the surface.

It should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the sites in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2019-2020.

4 Recommendations

1. THAT monitoring of consented activities at the beach camps in the 2019-2020 year be amended from that undertaken in 2018-2019, by incorporating inspections of the soakage trenches at the beach camps during routine site inspections, to check for any evidence of effluent ponding at the surface.
2. THAT should there be issues with environmental or administrative performance in 2019-2020, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.

Glossary of common terms and abbreviations

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

cfu	Colony forming units. A measure of the concentration of bacteria usually expressed as per 100 millilitre sample.
Conductivity	Conductivity, an indication of the level of dissolved salts in a sample, usually measured at 20°C and expressed in mS/m.
Contact recreation	Recreational activities that bring people physically in contact with water, involving a risk of involuntary ingestion or inhalation of water.
E. coli	*Escherichia coli*, an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 millilitre sample.
Ent	Enterococci, an indicator of the possible presence of faecal material and pathological micro-organisms. Usually expressed as colony forming units per 100 millilitre of 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 reduce the likelihood of an incident occurring.
Investigation	Action taken by Council to establish what were the circumstances/events surrounding an incident including any allegations of an incident.
Incident Register	The Incident Register contains a list of events recorded by the Council on the basis that they may have the potential or actual environmental consequences that may represent a breach of a consent or provision in a Regional Plan.
Median	Central value when values are arranged in order of magnitude.
MPN	Most Probable Number. A method used to estimate the concentration of viable microorganisms in a sample.
mS/m	Millisiemens per metre.
Resource consent	Refer Section 87 of the RMA. Resource consents include land use consents (refer Sections 9 and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14) and discharge permits (Section 15).
RMA	*Resource Management Act 1991* and including all subsequent amendments.
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 a Science Services Manager.

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Appendix I

Resource consents held by the New Plymouth District Council

Consent number	Purpose	Granted	Review	Expires
Water discharge permits				
2046-3	To discharge treated septic tank sewage effluent via soakage trenches into groundwater in the vicinity of the Urenui River	6 December 2002	June 2015	1 June 2021
1389-3	To discharge treated septic tank effluent via soakage trenches into groundwater in the vicinity of the Onaero River	6 December 2002	June 2015	1 June 2021

Water abstraction permits

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

Water discharge permits

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

Air discharge permits

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

Discharges of wastes to land

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

Land use permits

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

Coastal permits

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

Consent 2046-3

Discharge Permit

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

Name of Consent Holder:	New Plymouth District Council Private Bag 2025 NEW PLYMOUTH
Consent Granted Date:	6 December 2002

Conditions of Consent

Consent Granted:	To discharge up to 85 cubic metres/day of treated septic tank sewage effluent via soakage trenches into groundwater in the vicinity of the Urenui River at or about GR: Q19:310-452
Expiry Date:	1 June 2021
Review Date(s):	June 2009, June 2015
Site Location:	Urenui Beach Motor Camp, Beach Road, Urenui
Legal Description:	Lot 1 DP 15787 Blk III Waitara SD
Catchment:	Urenui

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 consent holder shall, in conjunction with the Taranaki Regional Council, undertake such bacteriological monitoring of the Urenui River 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.

Signed at Stratford on 6 December 2002

For and on behalf of
Taranaki Regional Council

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Director-Resource Management

Discharge Permit

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

Name of Consent Holder:	New Plymouth District Council Private Bag 2025 NEW PLYMOUTH
Consent Granted Date:	6 December 2002

Conditions of Consent

Consent Granted:	To discharge up to 17 cubic metres/day of treated septic tank sewage effluent via soakage trenches into groundwater in the vicinity of the Onaero River at or about GR: Q19:284-448
Expiry Date:	1 June 2021
Review Date(s):	June 2009, June 2015
Site Location:	Onaero Bay Motor Camp, State Highway 3, Onaero
Legal Description:	Sec 82 Urenui Dist Blk III Waitara SD Kaipikari Farm Sett Rec Res
Catchment:	Onaero

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 consent holder shall, in conjunction with the Taranaki Regional Council, undertake such bacteriological monitoring of the Onaero River 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.

Signed at Stratford on 6 December 2002

For and on behalf of
Taranaki Regional Council

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Director-Resource Management