# **NPDC Coastal Structures**

Monitoring Programme
Biennial Report
2020-2022

Technical Report 2022-84





Taranaki Regional Council Private Bag 713 Stratford

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# **Executive summary**

New Plymouth District Council (NPDC) is responsible for various coastal permits around the New Plymouth area. This report for the period July 2020 to June 2022 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess NPDC's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of NPDC's coastal structures.

NPDC holds 46 resource consents which are assessed in this monitoring programme. Each consent includes conditions setting out the requirements that NPDC must satisfy. There are 26 permits relating to coastal protection, six permits relating to stormwater outfalls, five permits for access structures, three permits covering stream outlet structures, three permits for bridges and three permits for outfall structures. NPDC holds additional coastal permits which are assessed and reported on within separate site specific monitoring programmes. Seven resource consents were reviewed during the monitoring period as the conditions were assessed as being inadequate to detect and address potential adverse effects that could arise from the exercise of the consents.

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

The Council's monitoring programme for the period under review included an annual inspection of each of the major protection structures, and a biennial inspection of the remaining structures. NPDC also inspected the structures and reported their findings to Council for review. The first round of beach profile surveying was carried out during the monitoring period.

During the year, NPDC demonstrated a good level of environmental and administrative performance with their coastal structure resource consents. There were no significant incidents during the year, however there were two occasions where consent conditions were not complied with, and one which resulted in an Abatement Notice being issued. It should be noted that NPDC have taken action to address both non-compliances, and despite these issues their overall monitoring and management of coastal structures has improved markedly over the last couple of years.

The results of Council monitoring found that the majority of coastal structures were well maintained by NPDC during the period under review. NPDC adhered to the recently developed guidance for planning coastal structure maintenance with regard to Kororā (Little Blue Penguin) during the monitoring period. This included considering the location of the works (with regards to known nesting hotspots), the timing of the works (avoiding sensitive nesting and moulting periods), early engagement with Council, and undertaking surveys with trained penguin detection dogs where necessary to inform the maintenance planning phase.

For the majority of structures, there were no definitive adverse impacts on the surrounding environment, based on visual observations. Additional monitoring (beach profile surveying), commenced during the monitoring period to enable improved detection of shoreline changes and potential adverse effects. NPDC were required to investigate the recent erosion of the Waitara East Beach shoreline, as identified during the last monitoring period. At the time of writing this report, Council is satisfied with the progress that has been made with this investigation, with findings due to be provided in early 2023.

For reference, in the 2020-2021 year, consent holders were found to achieve a high level of environmental performance and compliance for 86% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 11% of the consents, a good level of environmental performance and compliance was achieved. In the 2021-2022 year, consent holders were found to achieve a high level of environmental performance and compliance for 88% of the consents monitored through the Taranaki tailored monitoring programmes, while for another 10% of the consents, a good level of environmental performance and compliance was achieved.

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 decreased from high to good (based on consent ratings related to the compliance issues). However, NPDC's overall management of the coastal structures has continued to improve in recent years.

This report includes recommendations for the 2022-2024 monitoring period.

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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 2020 to June 2022 by the Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by New Plymouth District Council (NPDC) relating to structures situated within the coastal marine area. The New Plymouth District covers an area of coast from the mouth of the Stony River just south of Okato, and extending some 100 km north to just south of the mouth of the Mokau River. NPDC administers various coastal reserves situated throughout the New Plymouth District.

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 coastal structures. Comments regarding the condition of structures are based on the intended use of the structure and associated requirements set out in the various consents. These comments are not to be regarded as an assessment of their structural integrity. This is the 15<sup>th</sup> report by the Council to cover the NPDC coastal permits for structures on the open coast 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 nature of the structures maintained by NPDC and their surrounding environments;
- the resource consents held by NPDC;
- the nature of the monitoring programme in place for the period under review; and

**Section 2** presents the results of monitoring during the period under review, including scientific and technical data.

Section 3 discusses the results, their interpretations, and their significance for the environment.

**Section 4** presents recommendations to be implemented in the 2022-2024 monitoring period.

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

#### 1.1.3 The Resource Management Act 1991 and monitoring

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

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

#### e. risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' 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 performance

Besides discussing the various details of the performance and extent of compliance by the consent holders, this report also assigns a rating as to each Company's environmental and administrative performance during the period under review. The rating categories are high, good, improvement required and poor for both environmental and administrative performance. The interpretations for these ratings are found in Appendix II.

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

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

#### 1.2 Overview of coastal structures

NPDC holds resource consents for a range of structures located within the Coastal Marine Area (at, or below Mean High Water Springs). The structures range from stormwater outfalls and stream outlets, to boat ramps, bridge abutments and hard protection structures such as rock rip rap seawalls and groynes. Most of NPDC's coastal structures are included in this monitoring programme and are reported on here. There are some exceptions where structures are monitored and reported on as part of separate compliance programmes (for example, the New Plymouth Wastewater Treatment Plant (NPWWTP) marine outfall structure is monitored and reported on as part of the NPWWTP compliance programme).

Typically situated in exposed, dynamic environments, monitoring of these structures is required to ensure they are maintained at a standard where they continue to function effectively and are not presenting any additional safety hazards. Furthermore, some of the larger structures can have a considerable effect on coastal processes including wave action and sediment movement. For example, end effects occur when wave refraction off hard protection surfaces, such as rock walls, causes increased erosion along adjacent, unprotected shorelines. For these structures, targeted monitoring is necessary to identify changes in the surrounding environment, such as end effects, and to discern those changes from natural processes.

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

If changes in beach volumes or shoreline positions are identified, and a consented structure is found to be partly responsible, then action can be taken to avoid, remedy or mitigate any adverse effects.

At the beginning of the 2020-2021 monitoring year, changes were made to this monitoring programme to ensure the monitoring was targeted and fit for purpose. These changes involved reducing the Council's inspection frequency for smaller structures from annual to biennial, whilst maintaining annual inspections for the larger structures. Additional, measurement based monitoring of the surrounding shoreline was also required for the larger structures. NPDC were also required to develop a monitoring plan which set out their own monitoring obligations. The key elements from this monitoring plan are summarised in Table 1 below.

Table 1 Summary of monitoring for different coastal structure categories

Category		NPDC monitoring	TRC monitoring
Minor structures	Stormwater outfalls, stream outlets and associated structures	Visual inspections; frequency ranging from weekly to two-monthly	Visual inspections (biennial)
	Boat ramps	Visual inspections (at least biennial)	Visual inspections (biennial)
	Bridges	Engineering inspection (biennial)	Visual inspections (biennial)
	Small protection structures	Visual inspections (at least biennial)	Visual inspections (biennial)
Major structures	Large protection structures	Engineering inspection (at least annual) Beach profile surveys (annual)	Visual inspections (annual)

Further details regarding the history of the structures, and the justification for the monitoring changes are provided in the previous monitoring report (TRC, 2020).

#### 1.3 Resource consents

NPDC holds 46 coastal structure resource consents that are included in this monitoring programme. Resource consent details 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. Signed copies of these resource consents can be requested from the TRC Consents Department.

Table 2 Summary of coastal structure permits held by NPDC

Consent Number	Sub-type	Location	Purpose	Expiry Date	Next review
	Stormwat	ter outfalls, stream outle	ets and associated structures (14 resource o	consents)	
4322-2	Outlet structure	Mangaotuku Stream	Flood control purposes	1/6/2026	-
4592-2	Outlet structure	Hongihongi Stream	Erect, place and maintain an outlet structure	1/6/2026	-
4594-2	Outlet structure	Mangaotuku Stream	Erect, place and maintain an outlet structure	1/6/2026	-
4595-3	Outfall	Eliot Street Coastal Area	Occupy coastal marine area with a marine outfall	1/6/2032	1/6/2026
4596-2	Outlet structure	East End and Fitzroy Beach	Erect, place and maintain two stormwater outlet structures	1/6/2026	-

Consent Number	Sub-type	Location	Purpose	Expiry Date	Next review	
4598-2	Outlet structure	Waitara River Estuary	Use and maintain stormwater outlet	1/6/2027	-	
4900-2	Outlet	Waitara River Estuary	Use and maintain stormwater outfall	1/6/2027	-	
5160-2	Outfall	New Plymouth Foreshore	Occupy coastal marine area with a stormwater outfall	1/6/2025	-	
5182-2	Outfall	Ngamotu Beach	Occupy coastal marine area with a stormwater outfall	1/6/2032	1/6/2026	
6096-1	Outlet structure	East End Beach	Erect, place and maintain stormwater outlet structure	Expired June 2021 s.124 protection	-	
7718-1	Outlet	Waitara River	Install, use and maintain outlet structure	1/6/2027	-	
6525-1	Other	Waitara River	Erect, place and maintain stormwater outlet structure	Expired June 2021 s.124 protection	-	
5223-3	Protection	Oakura Beach	Occupy coastal marine area with a stormwater outfall and boulder rip rap minor toe protection	1/6/2048	1/6/2026	
6411-1	Protection	Urenui River Estuary	Erect, place and maintain gabion basket and rock rip rap protection	Expired June 2020 s.124 protection	-	
		Boat ramps ar	nd bridges (8 resource consents)			
4004-3	Boat ramp	Tongaporutu River Estuary	Boat ramp – use and maintain	1/6/2027	-	
4065-3	Boat ramp	Urenui River Estuary	Boat ramp – use and maintain	1/6/2027	-	
6553-1	Boat ramp	Paritutu/Back Beach	Erect, place and maintain existing boat ramp	Expired June 2020 s.124 protection	-	
7255-1	Boat ramp	Waitara River	Remove a boat ramp, to erect and maintain an upgraded boat ramp, jetties and pontoons	1/6/2027	-	
4590-2	Bridge	Onaero River Estuary	Bridge – use and maintain	1/6/2027	-	
4603-2	Bridge	Waiwhakaiho River Estuary	Erect, place and maintain a concrete foot bridge	1/6/2026	-	
7442-1	Bridge	Waiwhakaiho River	Erect, place and maintain a footbridge	1/6/2026	-	
10528-1	Other	Waitara Estuary	Construct a timber boardwalk	1/6/2033	1/6/2027	
(Minor)	(Minor) Riverine protection structures and small open coast protection structures (14 resource consents)					
4019-3	Protection	Urenui River Estuary	Riverbank protection works	1/6/2039	1/6/2027	
4183-3	Protection	Urenui River Estuary	Riverbank protection works	1/6/2039	1/6/2027	
10437-1.2	Protection	Urenui Estuary	Erect and place rock rip rap wall	1/6/2033	1/6/2027	
4583-2	Protection	Oakura River Estuary	Erect, place and maintain rock boulder protection works, and to occupy coastal space	1/6/2026	-	

Consent Number	Sub-type	Location	Purpose	Expiry Date	Next review
6270-1	Protection	Oakura River Estuary	Erect, place and maintain rock rip rap boulder protection	Expired June 2020 s.124 protection	-
4584-2	Protection	Oakura Beach	Erect and maintain a boat ramp, foreshore protection works and other associated structures	1/6/2025	-
7649-1	Protection	Waiwhakaiho River	Erect, place and maintain rip rap seawall	1/6/2026	-
6242-1	Protection	Te Henui Stream Estuary	Erect, place and maintain gabion basket and rock rip rap protection	Expired June 2020 s.124 protection	-
4818-2	Protection	Tongaporutu Estuary	Use and maintain four groynes and rip rap	1/6/2027	-
9287-1	Protection	Onaero River	Place and maintain rock groynes	1/6/2027	-
4586-2	Protection	Fitzroy Beach	Erect and maintain a boat ramp, protection works and occupy coastal space	1/6/2026	-
5412-3	Protection	Oakura Beach	Occupy coastal marine area with a boulder rip rap	1/6/2048	1/6/2026
5523-3	Protection	Wairau Stream, Oakura Beach	Occupy coastal marine area with a boulder rip rap	1/6/2048	1/6/2026
7007-2	Protection	Urenui Beach	Erect, place and maintain a rock rip rap seawall	1/6/2033	1/6/2027
	(N	lajor) Large open coast	protection structures (10 resource consent	s)	
4523-1	Protection	East End Beach	Erect and maintain a rockwall	1/6/2025	-
4585-2.1	Protection	Waiwhakaiho River Mouth	Rock groyne – erect and maintain	1/6/2026	-
4587-2.1	Protection	Te Henui Stream Mouth	Rock groyne – erect and maintain	1/6/2026	-
4600-2.1	Protection	Waitara River	Use and maintain training walls	1/6/2027	-
4602-1	Protection	New Plymouth Foreshore	Place and maintain rock protection works, rock revetment and stormwater outlet structures	1/6/2025	-
5035-1	Protection	Onaero Beach	Place and maintain boulder rock seawall	1/6/2026	-
5102-4.1	Protection	Bell Block	Erect, place and maintain boulder rock seawall	1/6/2026	_
5761-2.2	Protection	Urenui Beach Foreshore	Maintain boulder rock rip rap seawall	1/6/2050	1/6/2027
9328-1.1	Protection	Waitara River	Erect boulder wall	1/6/2027	
10132-1.2	Protection	Onaero Beach	Construct incision repairs	1/6/2050	1/6/2027

Seven resource consents were reviewed during the 2020-2022 monitoring period, including 4585-2.1, 4587-2.1 and 5102-4.1 in August 2020, and 4600-2.1, 9328-1.1, 5761-2.2 and 10132-1.2 in August 2021. The reasons for the review, and the information taken into account when deciding to review the consents were that:

- The environmental effects caused by coastal structures can occur gradually over a long time period, and can be difficult to discern from natural processes; therefore tailored monitoring programmes need to include specific survey methodologies.
- In 2001, Tonkin & Taylor and DTEC Consulting were commissioned by the Taranaki Regional Council (the Council) to provide recommendations on compliance monitoring for coastal structures in Taranaki. The report included general monitoring requirements, as well as site specific recommendations. These recommendations were never adopted in their entirety.
- In 2012, Tonkin & Taylor were commissioned again in order to provide up to date monitoring specifications for the New Plymouth District Council (NPDC) and South Taranaki District Council's (STDC) coastal structures. However, once again, these monitoring specifications were never implemented.
- A major reason these additional monitoring components had never been adopted is because there was no specific requirement to do so in any of the resource consents associated with the structures.
- The additional monitoring requirements involve survey methods which need to be carried out by suitably qualified personnel, hence why the Council has been unable to undertake this work as part of the existing monitoring programme.
- This meant that the onus had been on NPDC to arrange for this monitoring to be undertaken. However, with no requirements laid out in the associated resource consents, it was difficult for the Council to ensure this work was carried out.
- Prior to the review, efforts to implement the monitoring specifications involved Memorandums of Understandings (MOUs) or verbal agreements between NPDC and Council. These arrangements subsequently failed as soon as there had been a change of staff in either organisation.
- Therefore the Council determined that the original conditions in the resource consents associated
  with significant coastal structures were not adequate to deal with potential adverse effects on the
  environment and/or they were not aligned with current best practice and expected levels of
  environmental performance.

The outcome of the review was to include the following four conditions into each of the consents:

- 1. The consent holder shall maintain the structure in a safe and sound state such that:
  - It does not fall into a state of disrepair and continues to function effectively for the purpose it was designed;
  - Its structural integrity is maintained; and
  - There is no settlement or loss of foundation material.
- 2. The structure shall not cause significant erosion of the foreshore or seabed.
- 3. The consent holder shall ensure that from 1 February 2022 monitoring of the foreshore and seabed in the vicinity of the structure is undertaken in accordance with a Monitoring Plan that has been approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity. The Monitoring Plan shall identify the techniques, methodologies, procedures and reporting requirements that will determine compliance with conditions 1 and 2, above.

**Advice note:** Compliance with this condition would generally be achieved by using techniques, methodologies and procedures that align with those in the "Coastal Structure Monitoring Specification Report" prepared for the Taranaki Regional Council by Tonkin & Taylor Ltd November 2014. Compliance

may also be achieved using other means provided they achieve an equivalent or greater level of survey accuracy and the results can be compared with those from the methods outlined in the Coastal Structure Monitoring Specification Report.

4. If significant or potentially significant erosion near the structure occurs, the consent holder shall, as soon as practicable, undertake an investigation to determine its cause and identify options to avoid, remedy or mitigate the adverse effects of that erosion. The details of the investigation shall be approved by the Chief Executive, Taranaki Regional Council, acting in a certification capacity.

## 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 NPDC coastal structures 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

Council inspected all major protection structures (associated with the following consents; 4523-1; East End seawall, 4585-2; Waiwhakaiho groyne, 4587-2; Te Henui groyne, 4600-2; Waitara groyne (training walls), 4602-1; New Plymouth City seawall, 5035-1; Onaero seawall, 5102-4; Bell Block seawall, 5761-2; Urenui seawall, 9328-1; Waitara groyne (boulder wall), 10132-1.1; Onaero seawall (incision repairs)) twice during the monitoring period, in June 2021 and June 2022. All remaining structures were inspected once by Council in June 2022.

With regard to permits for coastal structures, the main points of interest were whether the structure was fulfilling its consented purpose (and complying with special conditions) and whether there were any resulting environmental effects (including end effects). Council comments regarding the condition of structures are based on the intended use of the structure and associated requirements set out in the various consents. These comments are not to be regarded as an assessment of their structural integrity. Furthermore, it should be noted that the assessments were made based on what could be readily inspected above sea level at the time of the inspections (a number of structures remain partially obscured beneath the tide at all times).

#### 1.4.4 Review of consent holder data

NPDC provided two inspection reports to Council covering the 2020-2021 and 2021-2022 monitoring years. The first annual beach profile survey report, covering works carried out in the 2021-2022 period was also provided to Council. Council reviewed these reports during the monitoring period, with the findings summarised and presented here.

#### 2 Results

#### 2.1 Stormwater outfalls, stream outlets and associated structures

**NPDC inspection dates:** Weekly / two-monthly and after high swells throughout monitoring period (depending on structure).

Council inspection dates: 8 and 27 June 2022.

During the 2020-2022 period, NPDC inspected the majority of structures on a weekly basis. The structures were all found in a satisfactory condition and no remedial works were required, other than the removal of sand and debris from some of the outlets following high swells.

During the same period, Council inspected all structures once; across two dates in June 2022. The majority of structures were found in a satisfactory condition at the time of the inspection, and did not appear to be presenting any safety concerns or adversely affecting the surrounding environment. With the inspections taking place soon after a winter storm event, some minor damage and surrounding shoreline changes were observed at a couple of locations.

The stormwater outfall located at the bottom of Bayly Road, at Ngamotu Beach (5182-1) had been damaged, with the grate dislodged and forced back into the pipe. This issue had already been identified by NPDC at the time of the inspection, with maintenance works scheduled.

The stormwater outfall located at the end of the Messenger Terrace beach access way in Oakura (5223-3), had become more exposed after big seas had removed a significant volume of sand from the beach in front of it (Photo 1). The structure was assessed to be stable and at no additional risk of collapse. NPDC are continuing to monitoring this outlet to ensure the structure and surrounding rock work protection do not deteriorate.



Photo 1 Beach level significantly higher in April 2020 (left), compared to June 2022 (right) at the Messenger Terrace stormwater outfall

# 2.2 Boat ramps and bridges

**NPDC** inspection dates: Boat ramps visually inspected once either in the 2020-2021 or 2021-2022 year depending on the structure. Bridges were inspected once in 2021-2022 by a structural engineer (Onaero Camp Bridge was also inspected in in 2020-2021).

Council inspection dates: 8 and 27 June 2022.

During the 2020-2022 monitoring period, there were no major issues with consented boat ramps, as identified by NPDC. All of these structures were found to be performing as designed at the time of their

inspections. It was noted that the Tongaporutu boat ramp (4004-3) required some minor maintenance, as some of the sand bags along the upstream edge had been shifted out of place. Only one of the three bridges that are included in this monitoring programme was found to be in need of maintenance. Assessments carried out during both years found that the Onaero camp bridge (4590-2) is in very poor condition and is now scheduled for renewal works in the 2023-2024 financial year.

During the same period, Council inspections were carried out across two dates, in June 2022. The boat ramps all appeared to be in a satisfactory condition, with only minor issues noted. At Tongaporutu (4004-3), minor maintenance was required to reinstate some of the sand bags that had been washed out of place (Photo 2). At Urenui (4065-3), there was a significant volume of sand covering the boat ramp which could potentially limit the use of the structure (Photo 2). At Back Beach (6553-1), bank scouring was identified adjacent to the boat ramp. No issues were identified with the Te Rewa Rewa bridge, or the Waiwhakaiho footbridge structures. Although not likely to be related to the structure, substantial bank scouring and undercutting was identified in the vicinity of the Waiwhakaiho footbridge (4603-2).





Photo 2 Displaced sand bags at the Tongaporutu boat ramp (left), and sand deposition on the Urenui boat ramp (right), 8 June 2022

# 2.3 Minor protection structures

**NPDC inspection dates:** All structures were visually inspected at least once, most during the 2020-2021 monitoring year.

Council inspection dates: 8 and 27 June 2022.

During the 2020-2022 monitoring period, there were no significant issues with minor protection structures, as identified by NPDC. These structures were generally found to be fulfilling their intended design purpose. Four consented structures were identified as needing non-urgent maintenance in the near future. The two riverbank protection structures near the Oakura River mouth require additional boulders to improve river bank protection at high tide (4583-2, 6270-1). Similarly, the Wairau Stream bank protection structure was identified as requiring additional boulder reinforcement, as it had become sparse in some sections (4583-2). Finally, the Te Henui River bank protection structure was also identified as needing additional reinforcement in the near future (6242-1).

During the same period, Council inspections were carried out across two dates, in June 2022. For the most part, these structures were found in a satisfactory condition and were not presenting any additional safety concerns or other impacts on the surrounding environment. Some localised bank scouring was observed in a number of areas, including Tongaporutu, Waiwhakaiho, Te Henui and Oakura; though this was not clearly attributable to the presence of associated structures. The (non-urgent) need for maintenance of the structures identified by NPDC was confirmed during the Council inspection round. Additionally, the condition of the rock protection structure in front of the Oakura Surf Club Building was found to have

deteriorated (4584-2). This was more apparent during the June 2022 inspection due to the recent loss of sand that had been covering the structure in recent years (Photo 3).





Photo 3 Oakura Beach rock protection structures 5523 (left) and 4584 (right), 8 June 2022

## 2.4 Major protection structures

#### 2.4.1 Urenui Beach rock rip rap seawall (5761-2.2)

NPDC inspection dates: 30 July 2020, 3 September 2020 and 5 August 2021.

Council inspection dates: 25 June 2021 and 8 June 2022.

No issues were identified during NPDC's initial inspection in July 2020. However, another inspection was carried out in September to assess the impact of the king tides and high winds that had subsequently occurred. It was found that the mid-eastern section of the wall had been overtopped, which led to slumping of the wall and erosion of the track behind it. Repairs were completed in February 2021, adding 220 tonnes of rock to the wall.

NPDC inspections carried out the following year confirmed the need for additional, preventative maintenance works to re-profile the structure and restore its 'as-built' dimensions. These works were carried out between March and April 2022, adding 1,500 tonnes of rock to the wall.

Council inspections did not identify any issues with the seawall additional to those already identified and addressed by NPDC. Aerial photographs were captured during the June 2021 inspection (Photo 4). During the final inspection of the monitoring period, carried out on 8 June 2022, the seawall appeared to be in good condition, with the profile restored and no further erosion behind the crest.





Photo 4 Urenui Beach rock rip rap seawall, June 2021

All maintenance works during the period under review were carried out in accordance with Rule 38 of the Interim Coastal Plan for Taranaki, and the associated Coastal Structure Maintenance Guidelines (prepared to assist with safe planning of maintenance works with regards to nesting Kororā (Little Blue Penguin; TRC, 2022). As part of the maintenance planning phase, trained penguin detection dog surveys were carried out to identify potential burrows in November 2020 and November 2021.

As per the revised monitoring requirements set out in resource consent 5761-2.2, the first round of beach profile monitoring was also carried out in March 2022.

#### 2.4.2 Onaero Beach rock rip rap seawall (5035-1)

NPDC inspection dates: 30 July 2020 and 11 August 2021.

Council inspection dates: 25 June 2021 and 8 June 2022.

No issues were identified during NPDC's initial inspection in July 2020. Similarly, the structure was found in a sound condition during the next inspection. However, preventative maintenance was scheduled for 2022 in order to re-profile the hollow/slumped sections of the wall that were beginning to appear. The maintenance was carried out in March 2022, adding 400 tonnes of rock to restore the profile of the structure.

No further issues were discovered during the either of the Council's two inspections carried out in the monitoring period. Aerial photographs were captured during the June 2021 inspection (Photo 5). The structure was found in a satisfactory condition, and there were no impacts on the adjacent shoreline that were readily visible.





Photo 5 Onaero Beach rock rip rap seawall, June 2021

All maintenance works during the period under review were carried out in accordance with Rule 38 of the Interim Coastal Plan for Taranaki, and associated the Coastal Structure Maintenance Guidelines (TRC, 2022). As part of the maintenance planning phase, a trained penguin detection dog survey was carried out at Onaero to identify potential burrows in November 2021.

As per the revised monitoring requirements, the first round of beach profile monitoring was also carried out in March 2022.

#### 2.4.3 Onaero Beach rock rip rap incision repairs (10132-1.2)

NPDC inspection dates: 30 July 2020, 17 March 2021, 11 August 2021, 13 April 2022 and 2 June 2022.

Council inspection dates: 19 February 2021, 17 March 2021, 25 June 2021 and 8 June 2022.

NPDC's inspections during the monitoring period found that the structures were generally performing as designed, and were serving to minimise erosion.

On 19 February 2021, Council determined that the structures themselves had not been maintained as originally designed and built. This assessment was based on the subsidence of boulders and their migration down the shore, and the associated erosion that was occurring on the western edge of the main incision repair. The structures themselves were intended as an interim solution to reduce erosion, and they had largely served this purpose since their construction. However, NPDC were still required to maintain the structures in an as-built condition so as to not impact the surrounding environment through loss of material, and to ensure that the structures would still remain as effective as possible at reducing the rates of erosion. Abatement Notice (EAC-23874) was issued to NPDC to undertake works to comply with the resource consent's maintenance requirement. However, in a subsequent meeting held in March 2021, it was agreed that the maintenance could wait until such a time that the beach volume had dropped to a level where the displaced boulders were exposed again. This would allow the works to be carried out with minimal beach disturbance, while increasing the recovery of boulders to be returned to the structure. While the sand volume on the beach was relatively high, there was reduced potential for ongoing erosion.





Photo 6 Onaero Beach rock rip rap incision repairs, June 2021

In June 2022, Council discovered that the volume of sand on the beach had reduced significantly following a storm, exposing much of the material that had migrated down the shore from its original position. NPDC were advised and the maintenance works were scheduled. As part of the maintenance planning process, a trained penguin detection dog survey was carried out at the Onaero incision repairs to identify potential burrows in May 2022. NPDC worked cooperatively with Council to carry out the maintenance works, which were completed after the period under review, in November 2022. Following completion of the maintenance, the structures were assessed as being compliant with consent conditions, and the requirements of the Abatement Notice had been addressed.

Aerial photographs were captured during the June 2021 inspection (Photo 6).

#### 2.4.4 Waitara River Mouth training wall structures (4600-2.1 and 9328-1.1)

NPDC inspection dates: 26 August 2020 and 11 August 2021.

Council inspection dates: 26 June 2021 and 8 June 2022.

NPDC's inspections during the monitoring period found that the structures were generally performing as designed. The main issues that were identified included degradation and cracking of the concrete on the inside of the western training wall (4600-2.1), and the slumping of middle section of the eastern training wall (9328-1.1). No maintenance was carried out during the monitoring period, however, there was no noticeable degradation of the structures during this time. NPDC have implemented more regular monitoring to assess any further degradation of the concrete on the inside of the western wall.





Photo 7 Waitara River mouth training wall structures, June 2021

Aerial photographs were captured by Council during the June 2021 inspection (Photo 7). No further structural issues were identified by Council during either inspection. However, as discussed in the previous monitoring report (TRC, 2020), there were ongoing concerns regarding the erosion of the eastern shoreline adjacent to these structures. This issue is discussed further in section 3.2.

The first round of beach profile monitoring was carried out in March 2022, as per the revised monitoring requirements set out in the resource consents.

#### 2.4.5 Bell Block rock rip rap seawall (5102-4.1)

NPDC inspection dates: 30 July 2020 and 1 September 2021.

Council inspection dates: 26 June 2021 and 27 June 2022.

NPDC's inspections during the monitoring period found that the structure was generally performing as designed. It was noted in July 2020 that there was some subsidence occurring, with boulders at the toe of the structure beginning to move down the beach. Additionally, the boulders at the crest of the wall had slumped, and a void had started to open up between the top of the wall and the land behind it. These issues were most prominent on the section of the wall in front of the main carpark at the end of Mangati Road. A large cobble berm was present again during the monitoring period. These cobbles were covering the lower portion of the seawall, and also rendered the boat ramp unusable. The next inspection, carried out in September 2021, identified the same issues, however there had been no apparent degradation since the previous year.

NPDC recognised that maintenance is required, however, they also noted that careful planning is necessary given the high density of nesting penguins within and behind the structure. Furthermore, these works need to be prioritised and scheduled within the existing programme of maintenance projects.

The same general issues were observed by Council during the period under review. It was also noted that the gradient of the rock wall had become quite steep in sections, due to the subsidence. This gradient of the profile will also need to be addressed with maintenance. No obvious end effects were discovered either side of the structure.

In aid of planning future maintenance on the seawall, two trained penguin detection dog surveys were carried out at Bell Block to identify potential burrows in November 2020 and November 2021.

The first round of beach profile monitoring was also carried out in March 2022, as per the revised monitoring requirements set out in resource consent 5102-4.1.

#### 2.4.6 Waiwhakaiho rock rip rap groyne (4585-2.1)

NPDC inspection dates: 26 August 2020 and 1 September 2021.

Council inspection dates: 26 June 2021 and 27 June 2022.

NPDC's inspections during the monitoring period found that the structure was in satisfactory condition and was performing as designed. A hollow was discovered at the top of the groyne, due to the movement of rocks further down the structure. The issue was addressed by placing a small number of boulders within the hollow, in order to eliminate the risk of anyone falling in. This minor maintenance task was carried out in accordance with Rule 38 in the Interim Coastal Plan for Taranaki, and the associated Coastal Structure Maintenance Guidelines (TRC, 2022). As part of the maintenance planning phase, a trained penguin detection dog survey was carried out along the groyne to identify potential burrows in November 2020.

No further structural issues were identified during Council inspections. Aerial photographs were captured during the June 2021 inspection (Photo 8). When the groyne was visited in June 2022, a significant volume of sand had been removed from the beach on the updrift side of the structure following a recent storm event. The beach had also changed from sand to cobble-dominated. It is unclear whether these changes were related to, or exacerbated by the presence of the groyne. However, the newly commenced beach profile monitoring is intended to help measure these changes and provide evidence of driving factors in the future. The first round of beach profile monitoring was carried out in March 2022, as per the revised monitoring requirements set out in resource consent 4585-2.1.





Photo 8 Waiwhakaiho rock rip rap groyne, June 2021

#### 2.4.7 East End rock rip rap seawall (4523-1)

NPDC inspection dates: 26 August 2020 and 1 September 2021.

Council inspection dates: 26 June 2021 and 27 June 2022.

NPDC's inspections during the monitoring period found that the structure was in reasonable condition and was performing as designed. Some minor issues were noted, including some bank scour within the river mouth and the degraded condition of the boat ramp structure. The East End Surf Club Boat Ramp has been scheduled for replacement in the 2022-2023 financial year.





Photo 9 East End rock rip rap seawall, June 2021

No further issues were identified during Council inspections. The recessed shoreline at the north eastern end of the structure did not appear to have changed from previous inspections. Aerial photographs were captured during the June 2021 inspection (Photo 9). There was lots of evidence of penguins nesting within the wall during the June 2022 inspection.

The first round of beach profile monitoring was carried out in March 2022, as per the revised monitoring plan requirements.

#### 2.4.8 Te Henui rock rip rap groyne (4587-2.1)

NPDC inspection dates: 26 August 2020 and 1 September 2021.

Council inspection dates: 26 June 2021 and 27 June 2022.

NPDC's inspection in August 2020 found that the groyne was in very poor condition, particularly in the mid to lower sections. Boulders and rocks had come apart, with the tide able to wash through the structure. Maintenance works were planned for the following summer to address the issue. In May 2021, 320 tonnes of rock were added to the structure, to reinstate the mid to lower sections. The repairs were highly effective and the structure was found to be in good condition during the next inspection carried out in September 2021.

The maintenance works were carried out in accordance with Rule 38 in the Interim Coastal Plan for Taranaki, and the associated Coastal Structure Maintenance Guidelines (TRC, 2022). As part of the maintenance planning phase, a trained penguin detection dog survey was carried out along the groyne to identify potential burrows in November 2020.





Photo 10 Te Henui rock rip rap groyne, June 2021

No further issues were identified during Council inspections. Aerial photographs were captured during the June 2021 inspection (Photo 10). In June 2022, the beach in front of the Buller Street carpark appeared to have built up considerably; indicating that the groyne was effectively trapping sediment on that side of the structure.

The first round of beach profile monitoring was carried out in March 2022, as per the revised monitoring plan requirements set out in resource consent 4587-2.1.

#### 2.4.9 New Plymouth Foreshore rock rip rap seawall (4602-1)

NPDC inspection dates: 26-28 August 2020 and 2-3 September 2021

Council inspection dates: 26 June 2021 and 27 June 2022

NPDC's inspections during the monitoring period found that the structure was in reasonable condition and was performing as designed. Given the size of the structure (which spans nearly continuously from the Port to the Te Henui River mouth), there are ongoing maintenance requirements every year. Maintenance is most frequently required between the Wind Wand and Woolcombe Terrace (beneath Bunnings), as this area is highly exposed to high wave energy. The 2020-2022 period was no exception to this. Between July and November 2020, 2,780 tonnes of rock were added to the wall along this section. During October and November 2021, another 680 tonnes of rock were added to the same area.

All maintenance works during the period under review were carried out in accordance with Rule 38 of the Interim Coastal Plan for Taranaki, and associated the Coastal Structure Maintenance Guidelines (TRC, 2022).

No further issues were identified through Council inspections during the monitoring period.

NPDC are planning to carry out more maintenance on the seawall, west of the Wind Wand, between April and May 2023.

# 2.5 Incidents, investigations, and interventions

The monitoring programme for the year was based on what was considered to be an appropriate level of monitoring, review of data, and liaison with 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 3 below sets out details of any incidents recorded, additional investigations, or interventions required by the Council in relation to NPDC's consented coastal structures during the 2020-2022 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 3
 Incidents, investigations, and interventions summary table

Date	Details	Compliant (Y/N)	Enforcement Action Taken?	Outcome
16/09/20	Significant erosion occurring along Waitara East Beach shoreline, adjacent to the river mouth structures.  Resource consents 4600-2.1 and 9328-1.1 require an investigation to be undertaken to identify the likely cause of the erosion. This investigation was ongoing at the end of the monitoring period, and as such NPDC were non-compliant with this consent condition.	N	N	At the time of writing this report, Council are satisfied with the progress that has been made with the investigation. Findings are due to be provided to Council in early 2023.  NPDC is already working with the affected community to mitigate the coastal hazard risk.
19/02/21	Onaero rock rip rap incision repairs not maintained as required (10132-1.1)	N	Abatement Notice	Maintenance completed in November 2022
12/11/21	Complaint received regarding drop off at the end of Back Beach boat ramp due to low beach level (6553-1).  Pedestrian beach access still provided for and Surf Life Saving rescues preferentially use the boat ramp at the Port to launch jet skis and IRBs along this part of coast.	Υ	N	Limited maintenance options available, other than to wait for sand to naturally build up again beneath ramp (sand push ups will be naturally washed away by tide soon after).

## 3 Discussion

## 3.1 Discussion of structure performance

The majority of coastal structures were well maintained by NPDC during monitoring period under review. Maintenance needs were typically identified early on, during scheduled inspections. This allowed a long lead in time to plan the works appropriately, whilst also ensuring the maintenance was completed before it became urgent.

The Onaero Beach rock rip rap incision repairs were non-compliant during the monitoring period, which resulted in an Abatement Notice being issued. Ultimately, NPDC worked cooperatively with Council to address the maintenance issues; restoring compliance with the resource consent and Abatement Notice.

NPDC provided Council with their Monitoring Plan, as required by the revised consent conditions, in November 2021. An Annual Summary Report was also provided to Council at the end of each monitoring year; a requirement set out in the Monitoring Plan.

#### 3.2 Environmental effects of exercise of consents

For the majority of structures, there were no definitive adverse impacts on the surrounding environment, based on visual observations. However, as noted in previous reports, it is difficult to measure, and in some cases even just detect, shoreline changes and erosional processes based on visual observations alone. In order to address this shortcoming, an additional monitoring component was introduced during the period under review. Resource consents for seven of the ten major protection structures were reviewed during 2020 and 2021, to include fit-for-purpose, measurement based monitoring as a requirement. Specifically, a beach profile survey methodology was adopted, based off of Tonkin and Taylor's Coastal Structure Monitoring Specifications which were prepared for the Council in 2014. A summary of the beach profile transects surveyed in March 2022 is presented below in Table 4. Where there were existing survey bench marks from historic surveys, those were included in the current programme. Where there was no existing survey information, new transects were established. Repeated surveys will allow for comparisons between datasets to determine changes in beach volume and shoreline position over time. The aim of this monitoring is to identify potential changes and trends that may be attributable the presence of the structures, due to processes such as end effects. If these changes are identified, and are found to be attributable to the structure, then action may be required to avoid, remedy or mitigate any adverse effects.

Table 4 Summary of beach profile transects surveyed in March 2022

Structure(s)	Beach profile transect details	New or existing
Urenui Beach rock rip rap seawall (5761-2.2)	URENUI 1 - TRANSECT NP058.28CP-026.2 URENUI 2 - TRANSECT NP058.38CP-009.4 URENUI 3 - TRANSECT NP058.48CP URENUI 4 - TRANSECT NP058.58CP-001.4 URENUI 5 - TRANSECT NP058.68CP-014.2 URENUI 6 - TRANSECT NP058.78CP-015.0	Existing, last surveyed Jan 2003
Onaero Beach rock rip rap seawall (5035-1) & Onaero Beach rock rip rap incision repairs (10132-1.2)	ONAERO 1 - TRANSECT NP054.47CP ONAERO 2 - TRANSECT NP054.65CP ONAERO 3 - TRANSECT NP054.76CP-000.5 ONAERO 4 - TRANSECT NP054.91CP ONAERO 5 - TRANSECT NP055.06CP	New New Existing, last surveyed Feb 2003 Existing, last surveyed Feb 2003 New

20

Structure(s)	Beach profile transect details	New or existing
Waitara River Mouth training wall structures (4600-2.1 & 9328-1.1)*	WAITARA 1 - TRANSECT NP043.48CP-001.8 WAITARA 2 - TRANSECT NP043.60CP-017.5 WAITARA 3 - TRANSECT NP043.69CP WAITARA 4 - TRANSECT NP044.31CP	Existing, last surveyed Jan 2003 Existing, last surveyed Jan 2003 Existing (no data found) New
Bell Block rock rip rap seawall (5102-4.1)	BELL BLOCK 1 - TRANSECT NP036.75CP BELL BLOCK 2 - TRANSECT NP037.00CP BELL BLOCK 3 - TRANSECT NP037.40CP BELL BLOCK 4 - TRANSECT NP037.68CP BELL BLOCK 5 - TRANSECT NP037.91CP	New New New New
Waiwhakaiho rock rip rap groyne (4585-2.1)	WAIWHAKAIHO 1 - TRANSECT NP032.08CP-025.3 WAIWHAKAIHO 2 - TRANSECT NP032.41CP+031.7 WAIWHAKAIHO 3 - TRANSECT NP032.79 WAIWHAKAIHO 4 - TRANSECT NP032.83CP WAIWHAKAIHO 5 - TRANSECT NP034.48CP-015.5	Existing, last surveyed Jan 2004 Existing, last surveyed Jan 2004 New New Existing, last surveyed Jan 1999
Te Henui rock rip rap groyne (4587-2.1) and East End rock rip rap seawall (4523-1)	EAST END 1 - TRANSECT NP030.45CP-005.4 EAST END 2 - TRANSECT NP030.59CP EAST END 3 - TRANSECT NP030.64CP+004.0 EAST END 4 - TRANSECT NP030.75CP EAST END 5 - TRANSECT NP030.84CP EAST END 6 - TRANSECT NP030.95CP-016.5 EAST END 7 - TRANSECT NP031.26CP-014.6	Existing, last surveyed Jan 1999 New Existing, last surveyed Jan 1999 Existing, last surveyed May 1999 Existing, last surveyed May 1999 Existing, last surveyed May 1999 Existing, last surveyed May 1999

<sup>\*</sup> The number and location of survey transects associated with the Waitara River Mouth training wall structures was limited due to health and safety considerations at this location. Additional transects should be included when these issues are resolved.

Significant erosion of the Waitara East Beach shoreline was identified during the last monitoring period (TRC, 2020). It was recommended in the last compliance monitoring report that NPDC undertake a full investigation to determine the cause of the increased shoreline erosion at Waitara East Beach, given the proximity to the river mouth structures, and the timing of the boulder wall construction which occurred in 2014. Following the review of resource consents 4600 and 9328 in August 2021, this investigation became a formal requirement under special condition 4 in both consents. Given that the investigation was ongoing at 1 July 2022, NPDC remain non-compliant with this consent requirement for the reporting period. However, at the time of writing this report, Council are satisfied with the progress that has been made with the investigation. Findings are due to be provided to Council in early 2023.

During the monitoring period, a number of structures had maintenance carried out. Despite maintenance being a requirement of coastal structure resource consents, the works must still comply with the Interim Coastal Plan. Under the Interim Coastal Plan for Taranaki, maintenance of coastal structures can often be carried out as a permitted activity under Rule 38, provided the standards, terms and conditions of the rule are complied with. One particularly relevant provision of Rule 38, is that there shall be no adverse effects on significant indigenous biodiversity. Kororā (Little Blue Penguin) are classified as significant indigenous biodiversity, and are commonly found nesting within and behind coastal structures such as rock rip rap seawalls. Therefore, it is critical that any maintenance works are planned and undertaken in a way that does not adversely affect Kororā. During the monitoring period, the Coastal Structure Maintenance Guidelines were prepared by Council and DOC to assist coastal practitioners with safely planning maintenance works with regards to nesting Kororā (TRC, 2022).

NPDC adhered to the Coastal Structure Maintenance Guidelines during the monitoring period. This included having consideration to the location of the works (with regards to known nesting hotspots), the timing of

the works (avoiding sensitive nesting and moulting periods), early engagement with Council, and undertaking surveys with trained penguin detection dogs where necessary to inform the maintenance planning phase. Table 5, below, provides a summary of the penguin detection dog surveys that were completed during the monitoring period.

Table 5 Summary of penguin detection dog surveys carried out during the 2020-2022 monitoring period

Date	Survey area / structure(s)
	Te Henui River Mouth (and associated structures) Waiwhakaiho River Mouth at coast (and associated structures)
4 – 5 November 2020	Bell Block rock rip rap seawall
	Urenui rock rip rap seawall
	Tongaporutu rock groynes
	Waiwhakaiho River Mouth upstream
23 – 24 November 2021	Bell Block rock rip rap seawall
25 24 November 2021	Urenui rock rip rap seawall
	Onaero rock rip rap seawall
18 May 2022	Waiwhakaiho River Mouth upstream
	Onaero rock rip rap incision repairs

# 3.3 Evaluation of performance

A tabular summary of the consent holder's compliance record for the year under review is set out in Tables 6 to 51.

#### 3.3.1 Stormwater outfalls, stream outlets and associated structures

Table 6 Summary of performance for Consent 4322-2 outfall structure for diversion of Mangaotuku Stream

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Notification prior to maintenance works		N/A
4.	BPO to prevent adverse environmental effects during maintenance		N/A
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Review of consent	No further review dates	N/A
Ov	Overall assessment of environmental performance in respect of this consent		High
Overall assessment administrative performance in respect of this consent			High

Table 7 Summary of performance for Consent 4592-2 outlet structure in Hongihongi Stream

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Notification prior to maintenance works		N/A
4.	Structure to be removed and area reinstated if no longer required		N/A
5.	Review of consent	No further review dates	N/A
Ove	Overall assessment of environmental performance in respect of this consent		High
Ove	erall assessment administrative perfo	High	

N/A = not applicable

Table 8 Summary of performance for Consent 4594-2 outlet structure Mangaotuku Stream

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Baseline "as built" survey required	Received 4 November 2008	Yes
4.	Notification prior to maintenance works		N/A
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Review of consent	No further reviews	N/A
Ov	Overall assessment of environmental performance in respect of this consent		High
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 9 Summary of performance for Consent 4595-3 Eliot Street outfall

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
2.	Structure maintained to the satisfaction of the Council	Unable to inspect due to tide	N/A
3.	Review of consent	No further reviews	N/A
Ove	erall assessment of environmental p	High	
Overall assessment administrative performance in respect of this consent			High

N/A = not applicable

Table 10 Summary of performance for Consent 4596-2 two stormwater outlet structures at Fitzroy and East End Beaches

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with documentation submitted in support of application	Inspections	Yes
2.	Consent holder to maintain structures in a safe and sound condition	Buried by sand – unable to inspect	N/A
3.	Consent holder to supply 'as built' plan of structures	Provided	Yes
4.	Notification prior to maintenance		N/A
5.	Gabions around the Fitzroy outlet to be covered at all times	Inspections	Yes
6.	Removal of foreign material should structure collapse		N/A
7.	Structures to be removed and area reinstated		N/A
8.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	High	
Ove	Overall assessment administrative performance in respect of this consent  High		

Table 11 Summary of performance for Consent 4598-2 stormwater outlet, Waitara

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Maintenance of structure to satisfaction of Council	Inspections	Yes
2.	Consent holder to notify Council prior to undertaking maintenance works		N/A
3.	Consent holder to provide "As built' survey of structure	Supplied	Yes
4.	Structure to be removed and reinstated if and when no longer required		N/A
5.	Review of consent	No further review dates	N/A
Ove	Overall assessment of environmental performance in respect of this consent		High
Ove	erall assessment administrative perfo	High	

N/A = not applicable

Table 12 Summary of performance for Consent 4900-2 stormwater outfall structure at Waitara

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent holder maintain structure	Inspections	Yes
2.	Notification prior to maintenance		N/A
3.	Structures to be removed and area reinstated when no longer required		N/A
4.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	High	
Overall assessment administrative performance in respect of this consent			High

Table 13 Summary of performance for Consent 5160-2 stormwater outfall structure on New Plymouth foreshore

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A
2.	Structure maintained to the satisfaction of the Council	Inspection	Yes
3.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 14 Summary of performance for Consent 5182-2 stormwater outfall structure on Ngamotu Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A
2.	Structure maintained to the satisfaction of the Council	Inspection	Yes
3.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfe	High	

N/A = not applicable

Table 15 Summary of performance for Consent 6096-1 stormwater outlet structure at East End

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent holder to notify Council prior to maintenance works		N/A
2.	Area and volume of disturbance minimised		N/A
3.	In-situ materials not be used for construction purposes		N/A
4.	Structure to be constructed and maintained in accordance with application		Yes
5.	Structure to be removed and area reinstated, if and when no longer required		N/A
6.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental performand	ce in respect of this consent	High
Ove	erall assessment administrative performance i	n respect of this consent	High

Table 16 Summary of performance for Consent 7718-1 stream outlet structure

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Outlet to be constructed in accordance with specified plans		N/A
2.	Commencement of works notification		N/A
3.	Area and volume of foreshore disturbance to be minimised		N/A
4.	Works in accordance with 'Typical requirements for pipes through stopbanks'		N/A
5.	Report provided by qualified engineer to assess compliance with previous condition		N/A
6.	Works only to occur during times of low flow		N/A
7.	Works remain responsibility of consent holder		N/A
8.	Structure shall not restrict fish passage	Low tide at time of inspection	N/A
9.	Structure removed, area reinstated, when no longer required	Structure still required	N/A
10.	Consent lapse clause		N/A
11.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	performance in respect of this consent	High
Ove	erall assessment administrative perf	ormance in respect of this consent	High

Table 17 Summary of performance for Consent 6525-1 stormwater outlet structure at Waitara

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent to be exercised in accordance with application	Inspection	Yes
2.	Consent holder to notify Council prior to commencement, and on completion of maintenance		N/A
3.	Area and volume of disturbance minimised		N/A
4.	In-situ materials not be used for construction purposes		N/A
5.	Lapse of consent		N/A
6.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perf	High	

Table 18 Summary of performance for Consent 5223-3 stormwater outfall structure and boulder rip rap at Oakura

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A
2.	Structure maintained to the satisfaction of the Council	Inspection	Yes
3.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 19 Summary of performance for Consent 6411-1 gabion basket riverbank protection for a stormwater outlet at Urenui

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Notification prior to and following construction and any maintenance works		N/A
2.	Structure to be maintained in accordance with documentation submitted in support of the application	Inspection	Yes

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
3.	BPO to avoid or minimise environmental effects		N/A
4.	Consent holder to ensure area and volume of riverbed disturbance be minimised		N/A
5.	Review of consent	Expired June 2020; s124 protection	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perf	ormance in respect of this consent	High

# 3.3.2 Boat ramps and bridges

Table 20 Summary of performance for Consent 4004-3 boat ramp at Tongaporutu

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
6.	Maintenance of boat ramp	Inspections	Yes
7.	Consent holder to notify Council prior to undertaking maintenance works		N/A
8.	Removal of structure when no longer required		N/A
9.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 21 Summary of performance for Consent 4065-3 boat ramp at Urenui

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure maintained	Inspection	Yes
2.	Notification prior to undertaking maintenance works		N/A
3.	Minimisation of environmental effects during maintenance works		N/A
4.	Structure removed and area reinstated if no longer required		N/A
5.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 22 Summary of performance for Consent 6553-1 boat ramp at Back Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	BPO to avoid or minimise environmental effects		N/A
2.	Exercise of consent in accordance with application	Inspections	Yes
3.	Written notification prior to exercise of consent		N/A
4.	No re-fuelling of construction machinery within coastal marine area		N/A
5.	Area and volume of foreshore disturbance minimised		N/A
6.	Signage to ensure public safety during construction		N/A
7.	BPO to avoid or minimise discharge of concrete slurry or debris		N/A
8.	Lapse of consent		N/A
9.	Review of consent	Expired June 2020; s124 protection	N/A
Ov	erall assessment of environmental p	performance in respect of this consent	High
Ov	erall assessment administrative perf	ormance in respect of this consent	High

Table 23 Summary of performance for Consent 7255-1 boat ramp, jetty and pontoons at Waitara

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	BPO to prevent or minimise adverse effects	Inspections	Yes
2.	Exercise of consent in accordance with documentation submitted in application	Inspections	Yes
3.	Structure to be maintained in safe and sound state	Inspections	Yes
4.	Notification prior to and following construction and maintenance		N/A
5.	Area and volume of foreshore disturbance to be minimised and reinstated as practicable		N/A
6.	All practicable measures to prevent discharge of debris and/or contaminants to the river bed		N/A
7.	Signage required during construction and maintenance		N/A
8.	Structures removed and area reinstated when no longer required		N/A
9.	Lapse of consent		N/A
10.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	erformance in respect of this consent	High
Ove	erall assessment administrative perfo	ormance in respect of this consent	High

Table 24 Summary of performance for Consent 4590-2 bridge over Onaero River

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Maintenance of bridge to satisfaction of Council	NPDC have identified that this structure requires maintenance; currently in planning phase	Yes
2.	Consent holder to notify Council prior to undertaking maintenance works		N/A
3.	Consent holder to provide "As built" plan of structure	Supplied 2009	Yes
4.	Structure to be removed and area reinstated if and when required		N/A
5.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	High	
Ove	erall assessment administrative perfo	High	

Table 25 Summary of performance for Consent 4603-2 footbridge at Waiwhakaiho

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Best practicable option to minimise environmental effects		N/A
2.	Exercise of consent in accordance with application	Inspection	Yes
3.	Structures to be maintained	Inspection	Yes
4.	Notification prior to maintenance works	No maintenance undertaken during year	N/A
5.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 26 Summary of performance for Consent 7442-1 Te Rewa Rewa Bridge

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspections	Yes
2.	Notification prior to works or maintenance	No maintenance undertaken during year	N/A
3.	Area and volume of disturbance minimised		N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
4.	Sediment disturbance minimised		N/A
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Lapse of consent		N/A
7.	Review of consent	No further review dates	N/A
Ov Ov	High High		

Table 27 Summary of performance for Consent 10528-1 Waitara boardwalk

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Construction shall be in accordance with specified plans	Inspections, liaison with project manager	Yes
2.	Notification prior to commencing works		N/A
3.	Works undertaken in accordance with Construction Management Plan		N/A
4.	Area and volume of foreshore disturbance shall minimised and reinstated		N/A
5.	No works undertaken while tide covers any part of work site		N/A
6.	Works shall comply with specified noise standards		N/A
7.	Boardwalk shall not impact on penguin breeding areas	Inspection	N/A
8.	Hazard signage		N/A
9.	Pedestrian signage requirements		N/A
10.	No lighting on boardwalk		N/A
11.	Structure shall be maintained in safe and sound condition	Inspection	Yes
12.	Cease works if archaeological remains discovered		N/A
13.	Consent lapse clause	Consent exercised	N/A
14.	Review of consent	Next review scheduled for June 2027, if required	N/A
Overall assessment of environmental performance in respect of this consent			High
Overall assessment administrative performance in respect of this consent			High

### 3.3.3 Minor protection structures

Table 28 Summary of performance for Consent 4818-2 groynes at Tongaporutu

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Maintenance of structures to satisfaction of Council	Inspection	Yes
2.	"As built" plan required	Supplied by consent holder	Yes
3.	Notification prior to maintenance works		N/A
4.	Structures removed, area reinstated when no longer required		N/A
5.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfe	High	

N/A = not applicable

Table 29 Summary of performance for Consent 4019-2 riverbank protection at Urenui Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Notification prior to and following maintenance works		N/A
2.	Best practicable option (BPO) to avoid or minimise discharges of silt or contaminants		N/A
3.	Area of disturbance minimised		N/A
4.	Structure removed and area reinstated if no longer required		N/A
5.	Review of consent	Next review scheduled for June 2027, if required	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 30 Summary of performance for Consent 4183-2 riverbank protection at Urenui

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Notification prior to and following construction and any maintenance works		N/A
2.	BPO to avoid or minimise discharge of silt or contaminants		N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
3.	Area of disturbance minimised		N/A
4.	Structure removed and area reinstated if no longer required		N/A
5.	Review of consent	Next review scheduled for June 2027, if required	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perf	High	

Table 31 Summary of performance for consent 10437-1.1 riverbank protection in Urenui

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure to be built in accordance with specified documentation	Inspection	Yes
2.	Notification prior to commencing works	Notification received	Yes
3.	Preparation and maintenance of, and adherence to, Construction Management Plan	Inspection	Yes
4.	Hazard signage	Inspection	Yes
5.	Construction to comply with specified noise standards	Inspection	Yes
6.	Erect boundary fence	Inspection	Yes
7.	Structure shall not impact on penguin breeding habitat	Inspection	Yes
8.	Structure to be maintained in safe and sound condition	Inspection	Yes
9.	Works cease if archaeological remains discovered	None discovered	N/A
10.	Consent lapse clause	Consent exercised	N/A
11.	Review of consent	Next scheduled June 2027, if required	N/A
Overall assessment of environmental performance in respect of this consent			High
Ove	erall assessment administrative perf	High	

Table 32 Summary of performance for Consent 9287-1 river mouth rock groynes

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent undertaken in accordance with application documentation		N/A
2.	Notification of commencement of works		N/A
3.	Provision of sediment control plan		N/A
4.	Area and volume of foreshore disturbance to be minimised		N/A
5.	Area and volume of riverbed disturbance to be minimised		N/A
6.	Rock material shall be free of vegetative/humus material		N/A
7.	Consent holder shall adopt BPO	No maintenance undertaken during year	N/A
8.	Signage during construction and maintenance works	No maintenance undertaken during year	N/A
9.	Structures maintained in safe and sound condition	Inspection	Yes
10.	Structure to be removed, and area reinstated, when no longer required	Structure still required	N/A
11.	Works cease if archaeological remains discovered		N/A
12.	Consent lapse clause	Consent exercised	N/A
13.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perf	ormance in respect of this consent	High

Table 33 Summary of performance for Consent 7649-1 Waiwhakaiho River protection

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Specifications of structure position	Works completed	N/A
2.	Notification prior to commencement and completion of works	No maintenance undertaken during year	N/A
3.	Area and volume of disturbance minimised	Works completed	N/A
4.	Sediment disturbance minimised	Works completed	N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
5.	Review of consent	No further review dates	N/A
O	verall assessment of environmental p	High	
0	verall assessment administrative perfo	High	

Table 34 Summary of performance for Consent 4586-2 boat ramp and rock protection at Fitzroy Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Baseline "as built" survey required	Received	Yes
4.	Notification prior to maintenance works	Notification provided	Yes
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 35 Summary of performance for Consent 6242-1 rock rip rap at Te Henui

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent holder to notify Council prior to construction and subsequent maintenance works		N/A
2.	Structure to be constructed in accordance with application	Inspection	Yes
3.	BPO to avoid or minimise environmental effects		N/A
4.	Area and volume of disturbance to be minimised		N/A
5.	Structure to be removed and area reinstated, if and when no longer required		N/A
6.	Review of consent	Expired June 2020; s124 protection	N/A
Ove	erall assessment of environmental p	High	
Ove	erall assessment administrative perfo	High	

Table 36 Summary of performance for Consent 4583-2 Oakura River bank protection

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Baseline "as built" survey required	Received	Yes
4.	Notification prior to maintenance works		N/A
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 37 Summary of performance for Consent 4584-2 boat ramp, foreshore protection works and associated structures at Oakura

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Baseline "as built" survey required	Received	Yes
4.	Notification prior to maintenance works		N/A
5.	Structure to be removed and area reinstated if no longer required		N/A
6.	Review of consent	No further review dates	N/A
Ov	Overall assessment of environmental performance in respect of this consent		High
Ov	erall assessment administrative perfo	High	

Table 38 Summary of performance for Consent 5412-3 stormwater outfall structure and boulder rip rap at Oakura

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A
2.	Structure maintained to the satisfaction of the Council	Inspection	Yes
3.	Review of consent	No further review dates	N/A
Ove	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 39 Summary of performance for Consent 5523-3 boulder rip rap protection around Wairau Stream,
Oakura Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Any changes to the structure require authorisation	Inspection	N/A
2.	Structure maintained to the satisfaction of the Council	Inspection	Yes
3.	Review of consent	Next scheduled in June 2026, if required	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perf	High	

Table 40 Summary of performance for Consent 6270-1 rock rip rap protection in Oakura River estuary

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	BPO to minimise effects on water quality		N/A
2.	Consent holder to notify Council prior to commencement of works or any major maintenance works		N/A
3.	Structures to be constructed in accordance with application	Inspections	Yes
4.	Area and volume of disturbance to be minimised		N/A
5.	Timing of works		N/A
6.	Structure to be removed and area reinstated, if and when no longer required		N/A
7.	Lapse of consent		N/A
8.	Review of consent	Expired June 2020; s124 protection	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 41 Summary of performance for Consent 7007-2 rip-rap seawall at Urenui

Condition requirement	Means of monitoring during period under review	Compliance achieved?
Construction of a low level seawall in two stages as described in the application	Completed	N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
2.	Construction commence from east to west and be undertaken in a maximum of two stages	Completed	N/A
3.	Dimensions of the wall as specified in the application	Completed	N/A
4.	Excavated loose unconsolidated beach material only used for foreshore reinstatement purposes seaward of the structure	No reinstatement undertaken	N/A
5.	Notification prior to and following construction and any maintenance works	No works undertaken	N/A
6.	Area and volume of foreshore disturbance minimised as far as practicable		N/A
7.	Erection of warning notices		N/A
8.	Compliance with relevant noise standards		N/A
9.	Construction of wall does not impact on areas, or access to areas, where penguins breed	Completed (compliant)	N/A
10.	Works shall cease if archaeological remains are discovered	Completed (compliant)	N/A
11.	Adopt BPO	Inspection	Yes
12.	Consent lapse in accordance with section 125 of the RMA		N/A
13.	Review of consent	Next scheduled June 2027, if required	N/A
Ove	erall assessment of environmental p	erformance in respect of this consent	High
Ove	erall assessment administrative perf	ormance in respect of this consent	High

# 3.3.4 Major protection structures

Table 42 Summary of performance for Consent 5761-2.2 rock rip rap seawall at Urenui (reviewed August 2021)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure to be maintained in a safe and sound condition	Inspections – maintenance carried out	Yes
2.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Yes

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
3.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001)  Subsequent monitoring carried out in accordance with monitoring plan	Yes
4.	Investigation required if significant erosion occurs	Not required during monitoring period	N/A
5.	Any changes to the structure require authorisation	Inspection	N/A
6.	Review of consent	Next scheduled review June 2027, if required	N/A
Ov	erall assessment of environmental p	High	
Ov	erall assessment administrative perfo	High	

Table 43 Summary of performance for Consent 5035-1 seawall at Onaero Beach

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure to be maintained in accordance with documentation submitted in support of the application	Inspections	Yes
2.	Notification prior to maintenance works	No maintenance carried out	N/A
3.	Consent holder to prevent discharge of contaminants during maintenance		N/A
4.	In situ beach material shall not be used for maintenance purposes		N/A
5.	Structure to be removed and area reinstated if and when no longer required		N/A
6.	Review of consent	No further reviews available	N/A
Ov	erall assessment of environmental perfor	rmance in respect of this consent	High
Ov	erall assessment administrative performa	ance in respect of this consent	High

Table 44 Summary of performance for consent 10132-1.2 (reviewed August 2021)

Purpose: To construct low level rock incision repairs		
Condition requirement	Means of monitoring during period under review	Compliance achieved?
Structure to be maintained in a safe and sound condition	Inspections	No

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
2.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Yes
3.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
4.	Investigation required if significant erosion occurs	Not required during monitoring period	N/A
5.	Authorisation of structure as per specified plans	Inspections	Yes
6.	Protections structures no higher than 5 m RL, and may be built any time in any order	Inspections	Yes
7.	Notification prior to commencing works	Completed	N/A
8.	Area and volume of foreshore disturbance minimal, and disturbances shall be reinstated	Completed	N/A
9.	Hazards signage	Completed	N/A
10.	Compliance with noise standards	Completed	N/A
11.	Penguin considerations	Completed	N/A
12.	Adopt BPO	Completed	N/A
13.	Review clause	Next scheduled in June 2027, if required	N/A
	erall assessment of consent compli	ance and environmental performance in respect	Good
Ove	erall assessment of administrative	performance in respect of this consent	High

Table 45 Summary of performance for Consent 4600-2.1 training works at Waitara (reviewed August 2021)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure to be maintained in a safe and sound condition	Inspections	Yes
2.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Pending further investigation

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
3.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
4.	Investigation required if significant erosion occurs	Investigation still pending	No
5.	Notification prior to maintenance	No maintenance undertaken during year	Yes
6.	Maintenance does not increase the size of the structures		N/A
7.	Structures to be removed and area reinstated when no longer required		N/A
8.	Review of consent	No further reviews available	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perfo	ormance in respect of this consent	Good

Table 46 Summary of performance for Consent 9328-1.1 boulder wall at Waitara River Mouth (reviewed August 2021)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Structure to be maintained in a safe and sound condition	Inspections	Yes
2.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Pending further investigation
3.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
4.	Investigation required if significant erosion occurs	Investigation still pending	No
5.	Construction shall be in accordance with specified plans	Works completed	N/A
6.	Notification prior to commencing works	Works completed	N/A
7.	Area and volume of foreshore disturbance shall minimised and reinstated	Works completed	N/A
8.	Hazard signage during construction	Works completed	N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
9.	Worksshall comply with specified noise standards	Works completed	N/A
10.	Consent holder shall adopt BPO		N/A
11.	Structure removed, area reinstated, when no longer required	Structure still required	N/A
12.	Consent lapse clause	Consent exercised	N/A
13.	Review of consent	Next optional review in June 2021, if required	N/A
Ove	erall assessment of environmental p	erformance in respect of this consent	High
Ove	erall assessment administrative perfo	ormance in respect of this consent	Good

Table 47 Summary of performance for Consent 5102-4.1 rock wall at Bell Block (reviewed August 2020)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent to be exercised in accordance with documentation submitted with application	Inspections	Yes
2.	Structure to be maintained in a safe and sound condition	Inspections	Yes
3.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Yes
4.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
5.	Investigation required if significant erosion occurs	Not required during monitoring period	N/A
6.	Baseline 'as built' survey plan required	Received	Yes
7.	Consent holder to notify Council prior to maintenance works	Notification received	Yes
8.	Maintenance to comply with noise standards		N/A
9.	Structure to be removed and area reinstated if and when no longer required		N/A
10.	Review of consent	No further reviews	N/A
Ove	erall assessment of environmental p	erformance in respect of this consent	High
Ove	erall assessment administrative perfo	ormance in respect of this consent	High

Table 48 Summary of performance for Consent 4585-2.1 groyne at Waiwhakaiho (reviewed August 2020)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Yes
4.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
5.	Investigation required if significant erosion occurs	Not required during monitoring period	N/A
6.	Baseline 'as built' survey required	Survey provided on 25 July 2008	Yes
7.	Notification prior to maintenance works		N/A
8.	Structure to be removed and area reinstated if no longer required		N/A
9.	Review of consent	Next scheduled in June 2020, if required	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 49 Summary of performance for Consent 4523-1 seawall (East End to Te Henui Stream)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Consent holder to notify Council prior to commencement, and on completion of maintenance		N/A
2.	Structure constructed and maintained in accordance with application	Inspections	Yes
3.	No refuelling of construction machinery within coastal marine area		N/A
4.	Construction to comply with noise standards		N/A
5.	In-situ beach material not to be used for construction purposes		N/A

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
6.	BPO to ensure minimal disturbance		N/A
7.	Structure to be removed and area reinstated, if and when no longer required		N/A
8.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perf	ormance in respect of this consent	High

Table 50 Summary of performance for Consent 4587-2.1 rock groyne at Te Henui Stream mouth (reviewed August 2020)

	Condition requirement	Means of monitoring during period under review	Compliance achieved?
1.	Exercise of consent in accordance with application	Inspection	Yes
2.	Structure maintained in safe and sound condition	Inspection	Yes
3.	Structure shall not cause significant erosion of foreshore or seabed	Inspections and beach profile surveys	Yes
4.	Monitoring undertaken in accordance with Monitoring Plan	Monitoring Plan provided to Council November 2021 (ECM_8627617_v2_INFRA-MP-001) Subsequent monitoring carried out in accordance with monitoring plan	Yes
5.	Investigation required if significant erosion occurs	Not required during monitoring period	N/A
6.	Baseline "as built" survey required	Received	Yes
7.	Notification prior to maintenance works		N/A
8.	Structure to be removed and area reinstated if no longer required		N/A
9.	Review of consent	No further review dates	N/A
Ov	erall assessment of environmental p	erformance in respect of this consent	High
Ov	erall assessment administrative perfo	ormance in respect of this consent	High

Table 51 Summary of performance for Consent 4602-1 rock protection works along New Plymouth foreshore

	Condition requirement	Means of monitoring during period under review	Compliance achieved?			
1.	Structural modifications to adhere to application		N/A			
2.	Consent holder to provide plan of structure	Received	Yes			
3.	Consent holder to develop and implement monitoring programme	Received	Yes			
4.	Consent holder to provide management strategy	Report ' A review of design and construction aspects of the New Plymouth walkway' received in November 2006	Yes			
5.	Structure to be maintained to satisfaction of Council	Inspections	Yes			
6.	Consent holder to notify Council prior to major maintenance	Notification received	Yes			
7.	Structure to be removed, if and when no longer required		N/A			
8.	Review of consent	No further review dates	N/A			
Overall assessment of environmental performance in respect of this consent						
Ov	Overall assessment administrative performance in respect of this consent  High					

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

Table 52 Evaluation of overall environmental performance over time

Year	High	Good	Improvement req.	Poor
2010	-	✓	-	-
2011	✓	-	-	-
2012	✓	-	-	-
2013 & 2014	✓	-	-	-
2015	✓	-	-	-
2016	✓	-	-	-
2017	✓	-	-	-
2018	✓	-	-	-
2019	✓	-	-	-
2020	✓	-	-	-
2021 & 2022	-	✓	-	-
Totals	9	2	0	0

### 3.4 Recommendations from the 2019-2020 Annual Report

In the 2019-2020 Annual Report, it was recommended:

- 1. THAT the proposed monitoring changes are implemented in 2020-2021, with Council inspections for minor structures reducing to biennial, and inspections of significant structures continuing on an annual basis. Additional, survey based monitoring will also be required for the beach volumes and shorelines surrounding the significant structures.
- 2. THAT as part of the proposed monitoring changes, NPDC provide Council with a monitoring plan (as required by the newly implemented resource consent conditions). The monitoring plan shall outline the monitoring that is scheduled for all coastal structures, ranging from the additional survey requirements for the significant structures, to the ongoing inspection regimes for all structures.
- 3. THAT NPDC should notify the Council via the proposed coastal plan notification form located in the online services section of the Council website (<a href="www.trc.govt.nz">www.trc.govt.nz</a>) at least five working days prior to commencing any maintenance work for coastal structures.
- 4. THAT NPDC should provide a summary of monitoring and maintenance of coastal structures on an annual basis. The details of this summary report shall be stipulated in the monitoring plan (recommendation 2).
- 5. THAT should there be issues with environmental or administrative performance in 2020-2021, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
- 6. THAT the option for a review of resource consents 4600-2, 5761-2, 7007-2, 9328-1, and 10132-1 in June 2021, as set out in the special conditions, be exercised, on the grounds that the consents were not necessitating the appropriate monitoring to identify potential adverse environmental effects.
- 7. THAT NPDC shall undertake an investigation to determine the cause of the shoreline erosion at Waitara East Beach (consistent with the new consent requirements to be incorporated into resource consents 4600-2 and 9328-1 after June 2021). The investigation shall also identify all options to avoid, remedy or mitigate the adverse effects of that erosion. The details of the investigation shall be approved by Council.

The majority of these recommendations were fully implemented during the year under review. A review of resource consent 7007-2 was not pursued as the resource consent only authorises the construction and placement of the western extension of the Urenui seawall (138 metres). Consent 5761-2.1 authorises the ongoing occupation of the entire seawall (564 metres), therefore it was only consent 5761-2.1 that needed to be reviewed. NPDC's investigation into the cause of the erosion at Waitara East Beach is in progress, but not yet completed. Council is continuing to monitor the delivery of this work.

# 3.5 Alterations to monitoring programmes for 2022-2024

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 should be noted that the proposed programme represents a reasonable and risk-based level of monitoring for the site(s) in question. The Council reserves the right to subsequently adjust the programme from that initially prepared, should the need arise if potential or actual non-compliance is determined at any time during 2022-2024.

### 4 Recommendations

- 1. THAT in the first instance, monitoring of NPDC coastal structures in the 2022-2024 year continues at the same level as in 2020-2022.
- 2. THAT should there be issues with environmental or administrative performance in 2022-2024, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
- 3. THAT any coastal structure maintenance, removals or demolition scheduled for 2022-2024 is planned and undertaken in accordance with the relevant rules in the Interim Coastal Plan for Taranaki.
- 4. THAT NPDC shall complete works to comply with resource consents 4600-2.1 and 9328-1.1.

# Glossary of common terms and abbreviations

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

Groyne A solid structure built from the shore out to the ocean that is designed to control

erosion. It may also be referred to as a spur or breakwater.

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.

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.

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.

MLWS Mean low water spring.

Mole A structure in the water usually made of stone used as a breakwater or a pier.

Resource consent Refer Section 87 of the RMA. Resource consents include land use consents (Sections 9

and 13 of the RMA), coastal permits (Sections 12, 14 and 15), water permits (Section 14)

and discharge permits (Section 15).

Revetment A facing of stones, sandbags etc., to protect a wall, embankment etc.

Rip rap A type of revetment style using loose but interlocked boulders.

RMA Resource Management Act 1991 and subsequent amendments.

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# Appendix I

# Resource consents held by NPDC

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

### 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 Number	Sub- type	Location	Purpose	Expiry Date	Next review		
Stormwater outfalls, stream outlets and associated structures (14 resource consents)							
4322-2	Outlet structure	Mangaotuku Stream	Flood control purposes	1/6/2026	-		
4592-2	Outlet structure	Hongihongi Stream	Erect, place and maintain an outlet structure	1/6/2026	-		
4594-2	Outlet structure	Mangaotuku Stream	Erect, place and maintain an outlet structure	1/6/2026	-		
4595-3	Outfall	Eliot Street Coastal Area	Occupy coastal marine area with a marine outfall	1/6/2032	1/6/2026		
4596-2	Outlet structure	East End and Fitzroy Beach	Erect, place and maintain 2 stormwater outlet structures	1/6/2026	-		
4598-2	Outlet structure	Waitara River Estuary	Use and maintain stormwater outlet	1/6/2027	-		
4900-2	Outlet	Waitara River Estuary	Use and maintain stormwater outfall	1/6/2027	-		
5160-2	Outfall	New Plymouth Foreshore	Occupy coastal marine area with a stormwater outfall	1/6/2025	-		
5182-2	Outfall	Ngamotu Beach	Occupy coastal marine area with a stormwater outfall	1/6/2032	1/6/2026		
6096-1	Outlet structure	East End Beach	Erect, place and maintain stormwater outlet structure	Expired June 2021 s.124 protection	-		
7718-1	Outlet	Waitara River	Install, use and maintain outlet structure	1/6/2027	-		
6525-1	Other	Waitara River	Erect, place and maintain stormwater outlet structure	Expired June 2021 s.124 protection	-		
5223-3	Protection	Oakura Beach	Occupy coastal marine area with a stormwater outfall and boulder rip rap minor toe protection	1/6/2048	1/6/2026		
6411-1	Protection	Urenui River Estuary	Erect, place and maintain gabion basket and rock rip rap protection	Expired June 2020 s.124 protection	-		
Boat ramps and bridges (8 resource consents)							
4004-3	Boat ramp	Tongaporutu River Estuary	Boat ramp – use and maintain	1/6/2027	-		
4065-3	Boat ramp	Urenui River Estuary	Boat ramp – use and maintain	1/6/2027	-		
6553-1	Boat ramp	Paritutu/Back Beach	Erect, place and maintain existing boat ramp	Expired June 2020 s.124 protection	-		

Consent Number	Sub- type	Location	Purpose	Expiry Date	Next review		
7255-1	Boat ramp	Waitara River	Remove a boat ramp, to erect and maintain an upgraded boat ramp, jetties and pontoons	1/6/2027	-		
4590-2	Bridge	Onaero River Estuary	Bridge – use and maintain	1/6/2027	-		
4603-2	Bridge	Waiwhakaiho River Estuary	Erect, place and maintain a concrete foot bridge	1/6/2026	-		
7442-1	Bridge	Waiwhakaiho River	Erect, place and maintain a footbridge	1/6/2026	-		
10528-1	Other	Waitara Estuary	Construct a timber boardwalk	1/6/2033	1/6/2027		
(Minor) F	Riverine pro	tection structures and s	mall open coast protection structures (14	resource c	onsents)		
4019-3	Protection	Urenui River Estuary	Riverbank protection works	1/6/2039	1/6/2027		
4183-3	Protection	Urenui River Estuary	Riverbank protection works	1/6/2039	1/6/2027		
10437-1.2	Protection	Urenui Estuary	Erect and place rock rip rap wall	1/6/2033	1/6/2027		
4583-2	Protection	Oakura River Estuary	Erect, place and maintain rock boulder protection works, and to occupy coastal space	1/6/2026	-		
6270-1	Protection	Oakura River Estuary	Erect, place and maintain rock rip rap boulder protection	Expired June 2020 s.124 protection	-		
4584-2	Protection	Oakura Beach	Erect and maintain a boat ramp, foreshore protection works and other associated structures	1/6/2025	-		
7649-1	Protection	Waiwhakaiho River	Erect, place and maintain rip rap seawall	1/6/2026	-		
6242-1	Protection	Te Henui Stream Estuary	Erect, place and maintain gabion basket and rock rip rap protection	Expired June 2020 s.124 protection	-		
4818-2	Protection	Tongaporutu Estuary	Use and maintain four groynes and rip rap	1/6/2027	-		
9287-1	Protection	Onaero River	Place and maintain rock groynes	1/6/2027	-		
4586-2	Protection	Fitzroy Beach	Erect and maintain a boat ramp, protection works and occupy coastal space	1/6/2026	-		
5412-3	Protection	Oakura Beach	Occupy coastal marine area with a boulder rip rap	1/6/2048	1/6/2026		
5523-3	Protection	Wairau Stream, Oakura Beach	Occupy coastal marine area with a boulder rip rap	1/6/2048	1/6/2026		
7007-2	Protection	Urenui Beach	Erect, place and maintain a rock rip rap seawall	1/6/2033	1/6/2027		
(Major) Large open coast protection structures (10 resource consents)							
4523-1	Protection	East End Beach	Erect and maintain a rockwall	1/6/2025	-		
4585-2.1	Protection	Waiwhakaiho River Mouth	Rock groyne – erect and maintain	1/6/2026	-		
4587-2.1	Protection	Te Henui Stream Mouth	Rock groyne – erect and maintain	1/6/2026	-		
		I .					

Consent Number	Sub- type	Location	Purpose	Expiry Date	Next review
4602-1	Protection	New Plymouth Foreshore	Place and maintain rock protection works, rock revetment and stormwater outlet structures	1/6/2025	-
5035-1	Protection	Onaero Beach	Place and maintain boulder rock seawall	1/6/2026	-
5102-4.1	Protection	Bell Block	Erect, place and maintain boulder rock seawall	1/6/2026	-
5761-2.2	Protection	Urenui Beach Foreshore	Maintain boulder rock rip rap seawall	1/6/2050	1/6/2027
9328-1.1	Protection	Waitara River	Erect boulder wall	1/6/2027	-
10132-1.2	Protection	Onaero Beach	Construct incision repairs	1/6/2050	1/6/2027

# Appendix II

Categories used to evaluate environmental and administrative performance

# Categories used to evaluate 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 environmental impacts and was not obliged to issue any abatement notices or infringement notices in relation to such impacts.

Good: Likely or actual adverse effects of activities on the receiving environment were negligible or minor at most. There were some such issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party but these items were not critical, and follow-up inspections showed they have been dealt with. These minor issues were resolved positively, co-operatively, and quickly. The Council was not obliged to issue any abatement notices or infringement notices in relation to the minor non-compliant effects; however abatement notices may have been issued to mitigate an identified potential for an environmental effect to occur.

#### For example:

- High suspended solid values recorded in discharge samples, however the discharge was to land or to receiving waters that were in high flow at the time;
- Strong odour beyond boundary but no residential properties or other recipient nearby.

Improvement required: Likely or actual adverse effects of activities on the receiving environment were more than minor, but not substantial. There were some issues noted during monitoring, from self-reports, or during investigations of incidents reported to the Council by a third party. Cumulative adverse effects of a persistent minor non-compliant activity could elevate a minor issue to this level.

Abatement notices and infringement notices may have been issued in respect of effects.

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

#### Administrative performance

**High:** The administrative requirements of the resource consents were met, or any failure to do this had trivial consequences and were addressed promptly and co-operatively.

**Good**: Perhaps some administrative requirements of the resource consents were not met at a particular time, however this was addressed without repeated interventions from the Council staff. Alternatively

adequate reason was provided for matters such as the no or late provision of information, interpretation of 'best practical option' for avoiding potential effects, etc.

Improvement required: Repeated interventions to meet the administrative requirements of the resource consents were made by Council staff. These matters took some time to resolve, or remained unresolved at the end of the period under review. The Council may have issued an abatement notice to attain compliance.

**Poor:** Material failings to meet the administrative requirements of the resource consents. Significant intervention by the Council was required. Typically there were grounds for an infringement notice.