

STDC Coastal Structures

Monitoring Programme

Biennial Report

2021-2023

Technical Report 2023-37



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Taranaki Regional Council
Private Bag 713
Stratford

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Executive summary

South Taranaki District Council (STDC) holds coastal permits for various structures including protection structures, boat ramps, wharves and jetties along the South Taranaki coast.

This report for the period July 2021 to June 2023 describes the monitoring programme implemented by the Taranaki Regional Council (the Council) to assess the Company's environmental and consent compliance performance during the period under review. The report also details the results of the monitoring undertaken and assesses the environmental effects of the STDC's activities.

During the monitoring period, STDC demonstrated an overall high level of environmental performance and high level of administrative performance.

STDC now holds a total of 9 coastal permits relating to coastal structures, which include a total of 36 conditions setting out the requirements that they must satisfy. STDC holds three coastal permits relating to boat ramps, wharves and jetties, one permit relating to an access structure and five permits relating to coastal protection from erosion. A further two coastal permits are held for outfall structures which are the subject of other monitoring programmes, namely, the Pātea Wastewater Treatment Plant, and the Ōpunake Wastewater Treatment Plant, and are therefore not discussed in this report.

The Council's monitoring programme for the period under review included annual inspections of the various structures, along with results from inspections done by STDC and their contractors in this monitoring period.

The monitoring found that the most coastal structures were compliant with consent conditions, with two minor non-compliances observed at Bayly Road (5512-2) and Pātea boat ramp and jetty (4566-2). In the previous monitoring year, one structure at Ōpunake Beach was found in a state of disrepair and was deemed to be non-compliant. This structure has since been replaced by a new wall and is now compliant with the associated resource consent. No issues, hazards, or changes from the previous monitoring period were noted in Kaupokonui boulder rip-rap, Caves Beach access ramp or Ōpunake Bay boat ramp. None of the monitored structures were causing definitive adverse effects on the surrounding environments, based on the observations and measurement-based monitoring carried out during the period under review.

For reference, 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 the 2022-2023 year, consent holders were found to achieve a high level of environmental performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (<1%) achieved a rating of poor.

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

This report includes recommendations for the 2023-2025 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 2021 to June 2023 by the Taranaki Regional Council (the Council) on the monitoring programme associated with resource consents held by South Taranaki District Council (STDC) relating to structures in the coastal marine area. The South Taranaki District covers an area of coast from the mouth of the Stony River just south of Okato in the north, extending southwest to approximately 2 km south of Wai-inu Beach, a coastline of approximately 140 km. STDC administers various coastal reserves situated throughout the South Taranaki District.

This report covers the results and findings of the monitoring programme implemented by the Council in respect of the consents held by STDC that relate to coastal structures, and is the 15th report by the Council to cover the STDC coastal permits for structures in the coastal marine area 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 through annual programmes;
- the resource consents held by STDC;
- the nature of the monitoring programme in place for the period under review; and
- a description of STDC's consented coastal structures.

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

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

Section 4 presents recommendations to be implemented in the 2023-2025 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 social-economic effects;
- b. physical effects on the locality, including landscape, amenity and visual effects;
- c. ecosystems, including effects on plants, animals, or habitats, whether aquatic or terrestrial;
- d. natural and physical resources having special significance (for example recreational, cultural, or aesthetic);
- e. risks to the neighbourhood or environment.

In drafting and reviewing conditions on discharge permits, and in implementing monitoring programmes, the Council is recognising the comprehensive meaning of 'effects' inasmuch as is appropriate for each

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

1.1.4 Evaluation of environmental and administrative performance

Besides discussing the various details of the performance and extent of compliance by the consent 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 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 the 2022-2023 year, consent holders were found to achieve a high level of environment performance and compliance for 878 (87%) of a total of 1007 consents monitored through the Taranaki tailored monitoring programmes, while for another 96 (10%) of the consents a good level of environmental performance and compliance was achieved. A further 27 (3%) of consents monitored required improvement in their performance, while the remaining one (<1%) achieved a rating of poor.¹

1.2 Site overview

1.2.1 Bayly Road

Bayly Road Beach is located just north of Cape Egmont. The beach is composed entirely of rock and cobble with no sand.

Coastal erosion and storm surge events eroded the coastal scarp along Coast Road at the end of Bayly Road. In order to protect Coast Road, and the recreational area between Bayly Road and the Cape Egmont Boat Club, STDC applied for, and was granted, a coastal permit (**5512**) to erect, place and maintain a boulder rip rap seawall on the foreshore on Coast Road at the end of Bayly Road.

As a result of the works, the boulder protection now extends from the boat ramp in the north to the pre-existing 40 m of boulder protection south of Bayly Road, with a total length of approximately 290 m (Photo 1).

¹ The Council has used these compliance grading criteria for more than 19 years. They align closely with the 4 compliance grades in the MfE Best Practice Guidelines for Compliance, Monitoring and Enforcement, 2018



Photo 1 Bayly Road seawall (April 2017)

1.2.2 Middleton Bay

Middleton Bay is a small 500 m long, pocket beach at Ōpunake. The beach is exposed to west and southwest storm waves, but is protected from northwest conditions (Tonkin & Taylor 2001).

The Council had been concerned about the state of the foreshore at Middleton Bay, Ōpunake for some years. In 1996 the Council was invited by the STDC to be a member of the Middleton Bay Working Party.

In 1998 STDC engaged Dr Jeremy Gibb to investigate and report on the coastal management of Middleton Bay, Ōpunake. A report 'A coastal management plan for Middleton Bay, Ōpunake, South Taranaki District', was produced in October 1998 (Gibb, 1998).

The report noted that the 80 m long rubble revetment northwest of the boat ramp was unsightly and adversely affecting the beach and adjacent foredune. While the underlying boulder substrate was natural, the additional rubble was not. The report recommended that:

- The randomly poured concrete should be removed;
- The alignment of the revetment be altered to follow the natural plan geometry of the beach-foredune; and
- The seaward face up to the level of the car park be reconstructed at a gradient of no less than 1:3 using rounded andesitic boulders.

The report also recommended that rubble situated to the northwest of the above mentioned revetment be removed from the foreshore.

Council supported the recommendations made within the Gibb report. The Council noted that the existing coastal erosion protection works were unlicensed, and that therefore the proposed reconstruction and realignment would require a coastal permit pursuant to Section 12 of the RMA.

Following an extreme storm surge event in March 1999 the Council requested an update from STDC regarding the proposed implementation of recommendations from the Gibb report. It was noted that the Council considered it pertinent that steps were taken to remove all debris (concrete, rubble, asphalt, steel, etc.) from the foreshore, and to license the remaining coastal erosion protection works.

Subsequently, STDC applied to reconstruct, and maintain a boulder rip rap seawall on the foreshore at the southeast end of Middleton Bay for coastal erosion protection purposes. This application was granted as coastal permit 5504.



Photo 2 Middleton Bay seawall and staircase (9 June 2021)

Due to Middleton Bay being a pocket sand beach, and the location of the revetment being well forward towards the surf zone, there is a high potential for adverse effects to the soft shoreline at the north-western end and in front of the structure. Within a year of the structure being constructed, there was erosion of the foredune at the north-western end of the revetment, which may have been as a result of 'end effects' from the structure (Tonkin & Taylor, 2001).

Coastal permit 5504 was renewed in August 2019. The renewal process authorised additional rock to be placed at the northern end of the structure as well as the installation of a new concrete staircase for beach access (Photo 2).

1.2.3 Ōpunake Bay boat ramp

In May 2005, the Ōpunake Artificial Surf Reef Trust was granted consents relating to construction of an artificial surf reef in Ōpunake Bay. As part of the project the STDC obtained a coastal permit (6791) to erect and maintain a boat ramp and breakwater at the northern end of Ōpunake Bay to assist in the construction of the reef.

The breakwater structure was once part of a fully functional jetty, constructed and used in the early 1900s to transfer cargo from rail to ship. The jetty has since been removed, but piles from the jetty still remain. The rock breakwater is still present, although the sea has moved rocks and levelled out the breakwater structure over many years. There was also a concrete boat ramp above mean low water springs (MLWS) adjacent to the breakwater.

STDC undertook some maintenance of the structures in order to assist in the construction of an artificial surf reef. The maintenance involved:

1. Reconstructing the concrete boat ramp;
2. Repositioning breakwater rocks to build up a section of the breakwater; and
3. Moving boulders from the basin at the base of the boat ramp back onto the breakwater structure.

The boat ramp was reconstructed with concrete to a width of 4 m, and length of 35 m down to MLWS (which is a +0.3 tide).

The breakwater is approximately 150 m long. The works involved building up a section along about a third of the current breakwater in order to stop waves during mid-tide breaking into the boat ramp area. The built up section is approximately 45 m long, 3 m wide, and to a height (reduced level) of 2 m.

1.2.4 Ōpunake Beach

Ōpunake Beach is a 500 m long pocket sand beach between two significant headlands which shelter the beach from all but direct south-west storm events.

Due to this sheltering, the wave energy entering the bay is generally low, and as a result there is a wide flat beach (Tonkin & Taylor 2001).

At the back of the beach, the former sand dune area has been flattened for the development of a surf club and camping ground. Only at the north-west end of the bay is there any remnant of dunes remaining. Over the rest of the bay, the boundary between the beach and the developed area used to be marked by a sea wall constructed from power poles, consented in 1994 by coastal permit **4578** (Tonkin & Taylor 2001).

The structure covered by this permit consists of a low retaining wall which stretches the length of Ōpunake Beach. Breaks and ramps in the wall provide pedestrian, vehicular and inflatable rescue boat access to the beach. The structure was constructed in stages, some of which are many years old. The structure was built in order to stabilise the natural accretion which has occurred on the beach and to protect and enhance the recreational facilities which exist immediately landward of the beach.

1.2.5 Kaupokonui

The Kaupokonui Stream enters the sea approximately 5 km west of Manaia. The stream is somewhat enlarged and tidal around the mouth and is popular for whitebaiting and fishing.

Following receipt of a complaint regarding works in the Kaupokonui Stream in 2002, investigation by Council officers discovered that substantial boulder rock rip rap had been placed on the true left bank of the Kaupokonui Stream (Photo 3).

Subsequent to these investigations, applications for a coastal permit (**5983**) (for those works within CMA, the upstream boundary being 5 m downstream of the footbridge) and for a land use consent (for those works upstream of the CMA) were received from the STDC.



Photo 3 Looking downstream along rock protection works in the Kaupokonui Stream (April 2017)

1.2.6 Pātea river mouth structures

The Pātea River is the former port that served the freezing works and town of Pātea in recent years and provides the most navigable entrance point along the stretch of coast between Port Taranaki and the Wanganui River. The Pātea River is used by both recreational and commercial fishermen, as well as companies undertaking surveys for offshore oil exploration.

The Pātea River mouth was formed by constructing two concrete block seawalls, or moles, in the late 19th and early 20th century to create a navigable entrance to the Pātea River. These moles run seawards from the existing high water mark for a distance of approximately 325 m on the southeast side (true left side) and approximately 112 m on the northern side (true right side). At the seaward end of the moles an opening of 60 m is present.

Coastal permit **4573** covers the following existing structures within the coastal marine area of the Pātea River mouth: river mouth training groynes; rock training wall; Mana Bay seawall; wave guide wall; and the Carlyle Bay rock protection works. While it is recognised that the structures have significant effects on sediment movement both within the river mouth and on the open coast, most of the associated environmental change has already occurred with the structures having been in place for many decades.

Significant levels of erosion occurred along this coastline during the past 50 years which led to the river moles becoming seriously degraded. Studies undertaken by consultants (Duffill Watts & King, 2006) showed that with the condition of the moles and rate of shoreline change, the river moles could decay, threatening the overall stability of the river entrance. If the stability of the river entrance changed, this could result in the passage between the river and sea becoming no longer navigable. From the studies undertaken by Duffill, Watts & King (2006), it was found that without some intervention process the Pātea River would break through behind the southeast mole within 20 to 25 years and prevent navigable access to the sea. It was proposed that the most effective method to maintain a navigable river entrance for small seagoing craft was to reconstruct the southeast seawall. Consent **6839** was granted by the Council authorising the works, which aimed to constrain the river channel to its existing alignment and prevent it from breaking through behind the left mole (Photo 5).



Photo 4 Pātea groynes (April 2017)

1.2.7 Pātea boat ramp

The boat ramp at Pātea has been in existence for many years, providing one of the few effective and safe boat launching facilities on the South Taranaki coast (Photo 6). The facilities are used extensively and are considered to be one of Pātea's more important recreational facilities.

The launching ramp was an undular concrete pad which extended from the end of the formed roadway of Turi Street, down to approximately the low tide level of the river. Upon granting of coastal permit **4566**, the STDC strengthened the existing boat launching ramp by placing a concrete strengthening overlay over the existing ramp. The overlay is 7 m wide and extends a further 3 m down into the river than the previous ramp, improving the launching facility.

The overlay was contoured so it is more consistent with natural beach profiles than the previous ramp and is therefore expected to have less effect on riverbed/beach processes than the previous ramp. In association with expanding and strengthening the ramp, the STDC reinstated and rock protected the eroding riverbank both immediately upstream and downstream of the ramp. The bank protection was wrapped smoothly into the existing bank and aligned in a manner which is compatible with wave refraction/diffraction patterns and which will not adversely affect natural river processes.



Photo 5 Pātea boat ramp (April 2017)

1.2.8 Pātea wharf

The wharf (permit **4575**) was constructed during the early years of the harbour endowment and was refurbished with upstream batter protection following floods in 1922. The structure extends downstream from the State Highway 3 Bridge on the true left bank of the stream.

The sub-structure piling proved to be effective river training works, and in conjunction with an adjacent smaller downstream wharf, caused significant realignment of the downstream river meander pattern. The realigned meander pattern that developed has created a stable regime. It is considered that this stability will remain so long as the left bank flow alignment out from the road bridge bend is maintained, with the batter protection work and wharf now preserving the required flow alignment.

1.2.9 Waverley access ways

Waverley Beach is an 8 km long stretch consisting of unique landforms of caverns, ravines, blowholes and eroding stacks. Eleven small peninsulas project 5-15 m out to sea. This is a dynamic coast with many un-vegetated and unstable dunes, with much of the area continually being eroded by wind and wave action.

The access way originally covered by consent **4567** has been in existence for many years. It was originally formed in order to provide access to the beach down the steep coastal cliffs present in the area. The access way is basically a bulldozed track which traverses down the mudstone cliffs.

The access way relieves access pressure from the fragile vegetated sand dunes which separate the beach from the Waverley Beach settlement, and as such has a role in protecting the environment. Full development of this access way was never completed and as the existing path is not deemed to be a coastal structure by Council, this consent was allowed to expire in June 2010.

The structure covered by consent **4579** consists of a concrete public access ramp way, 20 m in length and 3 m in width with an associated 2 m wide by 16 m long concrete step-way down the western edge of the ramp (Photo 7). The ramp extends down to the beach sands from the upper ground level of the mudstone coastal bluffs, providing access to Caves Beach, again reducing pedestrian damage of the fragile sand dunes.



Photo 6 Access to Caves Beach (April 2017)

1.3 Resource consents

STDC currently holds 9 coastal permits, the details of which are summarised in the table below. Summaries of the conditions attached to each permit are set out in Section 3 of this report.

Consent 4573 underwent review during the 2021-2023 period which resulted in changes to consent conditions.

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

Table 1 Summary of coastal structure permits held by STDC

| Consent number | Sub-type | Location | Purpose | Expiry Date |
|----------------|------------|---------------|-------------------------------|--------------------------|
| 4566-2 | Boat ramp | Pātea | Boat ramp and jetty | 1/06/2028 |
| 4573-2 | Protection | Pātea | Maintain moles etc. | Superseded 19/08/2022 |
| 4573-2.1 | Protection | Pātea | Maintain moles etc. | 1/06/2034 |
| 4575-2 | Wharf | Pātea | Maintain wharf | 1/06/2028 |
| 4578-2 | Protection | Ōpunake Beach | Retaining wall and access | 1/06/2030 |
| 4579-2 | Access | Waverley | Public access ramp | 1/06/2028 |
| 5504-2 | Protection | Middleton Bay | Boulder rip rap seawall | 1/06/2036 |
| 5512-2 | Protection | Bayly Road | Boulder rip rap seawall | 1/06/2031 |
| 5983-2 | Protection | Kaupokonui | Boulder rip rap | 1/06/2035 |
| 6791-1 | Boat ramp | Ōpunake Bay | Boat ramp and rock breakwater | 1/06/2024 |

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 STDC coastal structures consisted of four 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 Council inspections

Structures were visited twice during the monitoring period (29 June 2022 and 13 June 2023). The main points of interest were consent compliance and potential environmental effects, including end effects. With regards to consent compliance, the structures were visually assessed to identify any apparent issues that either posed a safety concern, or meant that the structure was no longer effectively functioning as intended under the consent. The Council also endeavoured to identify potential erosional end effects associated with the structures. It is important to note that the Council has not undertaken a formal engineering assessment of these structures during the period under review and that the summary of Council observations presented in this report must be interpreted accordingly.

1.4.4 STDC inspections

STDC also inspected each structure during the monitoring period in order to make their own assessment of consent compliance, and generally monitor the condition of each structure and the surrounding coastal environment. Additional inspections were also carried out by contractors on behalf of STDC during the monitoring period. The contractors included Coastal Systems Ltd (CSL) and BECA. These inspection reports were provided to Council for review.

1.4.5 Survey based monitoring

STDC have begun to undertake additional, survey based monitoring at selected coastal sites in order to monitor changes in coastal processes that may be attributed to the presence of consented coastal structures. To date, this monitoring has involved drone-based topographical surveys and ground-based beach profile surveying (Taylor Patrick Ltd; TPL) and hydrographic surveys (Fugro Ltd; Fugro). Survey results are analysed and reported on by CSL. The details of this monitoring, including methodology, sites, frequency, data analysis and reporting, is documented in a monitoring plan that was developed by CSL on behalf of STDC and approved by Council. This latest revision of this monitoring plan was received on 22 November 2023.

2 Results

2.1.1 Bayly Road

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 2.

Table 2 Bayly Road seawall monitoring summary 2021-2023

| 5512-2: Bayly Road seawall | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|----------------------------------------|
| Council inspection dates: | 29 June 2022 13 June 2023 | STDC inspection date: | 3 Mar 2022 (CSL) 18 May 2023 (STDC) |
| Inspection summary: This structure was inspected twice by Council in the 2021-2023 period. During the latest inspection, erosion was observed by the picnic table (Photo 7), extending to below the pine trees adjacent to the rip-rap. This section in its current state was assessed as being steep and hazardous, and needing to be repaired. Moreover, evidence was observed of unauthorized maintenance works likely carried out by members of the public in an attempt to fill the scouring sections with alternative materials (i.e., broken concrete, Photo 8). In multiple sections of the seawall, boulders appeared partially perched and in need of maintenance to reduce the risk of them falling. STDC also carried out an inspection of this structure during the year under review and identified the same issues. Their report was provided to Council on 30 June 2023. Following the discovery of the issues, STDC have installed fencing and warning signage near the picnic table while further remedial works are planned. | | | |
| Survey based monitoring summary: This structure has not been identified as requiring additional, survey based monitoring. | | | |
| Overall compliance assessment: Minor non-compliance. Pending remedial works. | | | |



Photo 7 Section of Bayly Road seawall below picnic table and pine trees (13 June 2023)



Photo 8 Unsuitable fill materials below picnic table and pine trees (13 June 2023)

2.1.2 Middleton Bay

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 3.

Table 3 Middleton Bay seawall monitoring summary 2021-2023

| 5504-1: Middleton Bay seawall | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|---------------------------------------------------------------|
| Council inspection date: | 29 June 2022 13 June 2023 | STDC inspection date: | 7 Nov 2022 (TPL) 26 Jan 2023 (Fugro) 31 May 2023 (STDC) |
| Inspection summary: | | | |
| <p>This structure was inspected twice by Council in the 2021-2023 period. At the time of the inspections, the structure appeared to be maintained in satisfactory condition from the access staircase to the boat ramp. During the 2022 inspection, considerable erosion had occurred throughout the bay, including the area adjacent to the rip-rap (Photos 9 - 10). A large amount of storm debris and driftwood was observed on top the rip-rap. The most pressing safety issue observed were the boulders on the remaining scarp (Photo 9). This issue was raised with STDC at the time of the inspection and they arranged for a contractor to remove the builders to eliminate the risk of them falling onto the beach. During the 2023 inspection, the erosion at the northern end had worsened from previous monitoring period, posing an imminent risk to the dwelling located there.</p> <p>STDC also carried out inspections of this structure during the year under review. Their report was provided to Council on 30 June 2023. Recommendations were made in the consent renewal application and the 2020-2021 compliance monitoring report to plant the adjacent scarp with sand binding plants to help stabilize the shoreline and reduce the rate of ongoing erosion. STDC advised Council that this planting took place on 19 December 2022, however, the plants were washed away soon after due to a storm event. STDC also confirmed that the nearby dwelling was removed during the monitoring period,</p> | | | |

following the increased erosion. Warning signs were also installed advising the public to avoid the eroding sand dunes. Design work is also underway to repair some degraded sections of the seawall.

Survey based monitoring summary:

Surveying in Middleton Bay is being carried out to identify impacts on coastal processes potentially influenced by the rip-rap. STDC engaged a surveying contractor (TPL) to carry out beach profile monitoring during the year. Beach profile transects were surveyed in Middleton Bay in 2019, 2020, 2021 and most recently in 7 November 2022. In November 2019, three beach profile transects were surveyed on the ground, in the following year two additional beach transects were incorporated for a total of five profile transects. Additionally, a drone survey was undertaken for the entire Bay. The most recent monitoring report was provided to Council on 31 May 2023. STDC contracted Fugro to carry out a hydrographic survey. Results of these surveys are summarised in Section 3.2.

Overall compliance assessment:

Compliant (based on the information available as summarised above).



Photo 9 Increased erosion adjacent to Middleton Bay seawall showing hazardous boulders on the scarp (29 June 2021)



Photo 10 Northern end of Middleton Bay seawall (13 June 2023)

2.1.3 Ōpunake Bay boat ramp

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 4.

Table 4 Ōpunake Bay boat ramp and breakwater monitoring summary 2021-2023

| 6791-1: Ōpunake Bay boat ramp and breakwater | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|---------------|
| Council inspection date: | 29 June 2022 13 June 2023 | STDC inspection date: | No inspection |
| Inspection summary: This structure was inspected twice in the 2021-2023 period. No obvious changes were observed from the previous monitoring period. Some scouring of the track was noted, along with rocks and boulders scattered across the boat ramp (Photo 11). STDC did not carry out an inspection of these structures during the period under review. However, STDC staff joined Council during the 13 June 2023 inspection. | | | |
| Survey based monitoring summary: Surveying in Ōpunake Bay was carried out to identify impacts on coastal processes potentially caused by the rock breakwater (consent 6791-1) and beach protection structures (consent 4578-2). STDC engaged a surveying contractor to carry out beach profile monitoring. Five beach profile transects were surveyed in Ōpunake Bay in 2019, 2020, 2021, and 2022. The most recent profile-survey was done on 7 November 2022. A drone-based survey was also undertaken on 7 November 2022. This information was provided to Council on 30 June 2023. Results of these surveys are summarised in Section 3.2. | | | |
| Overall compliance assessment: Compliant (based on the information available as summarised above). | | | |



Photo 11 Ōpunake Bay boat ramp and rock groyne (13 June 2023).

2.1.4 Ōpunake Beach

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 5.

Table 5 Ōpunake Beach protection structures and access ways monitoring summary 2021-2023

| 4578-2: Ōpunake Beach protection structures and access ways | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|---------------------------------------------------------------|
| Council inspection date: | 29 June 2022 13 June 2023 | STDC inspection date: | 7 Nov 2022 (TPL) 25 Jan 2023 (Fugro) 31 May 2023 (STDC) |
| Inspection summary: The structures were inspected twice in the period 2021–2023. Since the previous monitoring period, the deteriorated lattice wall structure at the eastern end of the beach had been replaced by a newly built concrete block wall (Photo 12). The timber retaining wall remained buried by the dunes at several points, therefore an assessment of this structure was not possible. The accessway, dunes and small rip-rap appeared to be in good condition. No obvious end effects, hazards or scouring associated with these structures was observed. However, an accumulation of driftwood and debris was found by the new concrete retaining wall. STDC staff carried out an inspection on 31 May 2023 and the report was provided to Council on 30 June 2023. Additional inspections were carried out by contractors (TPL and Fugro) in the period 2021-2023 to conduct measurement based monitoring. | | | |
| Overall compliance assessment: Compliant (based on the information available, as summarised above). | | | |



Photo 12 Opunake Beach replacement structure (13 June 2023)

2.1.5 Kaupokonui

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 6.

Table 6 Kaupokonui boulder rip-rap monitoring summary 2021-2023

| 5983-2: Kaupokonui boulder rip-rap | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------|----------------------------------------|
| Council inspection date: | 13 June 2023 | STDC inspection date: | 4 Mar 2022 (CSL) 17 May 2023 (STDC) |
| Inspection summary: At the time of the inspection, the structure appeared to be in reasonable condition. No imminent hazards were identified associated with the structure. It was observed that a recent slip had occurred at the adjacent bluff (Photo 13), highlighting the ongoing risk of cliff collapse and the need for people to avoid that area for the time being. STDC also carried out an inspection of this structure during the year under review. Their report was provided to Council on 30 June 2023. Additionally, STDC contracted CSL to carry out an inspection as part of STDC's monitoring of minor structures. STDC provided their report to the Council on 30 June 2023. | | | |
| Survey based monitoring summary: This structure has not been identified as requiring additional, survey based monitoring. | | | |
| Overall compliance assessment: Compliant (based on the information available, as summarised above). | | | |



Photo 13 Recent land-slip observed downstream of structure (13 June 2023)

2.1.6 Pātea River mouth structures

A summary of the monitoring carried out in 2021–2023 is presented below, in Table 7.

Table 7 Pātea River mouth structures monitoring summary 2021–2023

| 4573-2: Pātea River mouth structures | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|--------------------|
| Council inspection date: | 29 June 2022 13 June 2023 | STDC inspection date: | 26 May 2022 (STDC) |
| Inspection summary: | | | |
| <p>The structures were inspected by Council twice in the 2021–2023 period. During the 2022 inspection, the structures appeared to be in a degraded, but satisfactory condition. A few slumping sections were observed on the northern mole and towards the end of the southern mole (Photo 15), however the structures still appeared to be functioning as designed. There was a reduction in the beach volume, as was apparent due to the exposed shipwreck on the northern side of the river mouth. No eroding, hazardous or perched sections were observed at the Mana Bay rock wall, half-tide wall or wave guide wall. The latter was more exposed due to the reduction of sand.</p> <p>At the time of the most recent inspection (13 June 2023), accessibility from the carpark to the beach had reduced due to erosion of the dune (Photo 14). This was raised with STDC and they are now looking into causes and options to restore access. No major issues were identified with the Mana Bay seawall, half tide wall or the wave guide wall. However, some of the rockwork had shifted out of place and needed repositioning. The maintenance works carried out on the northern mole during April 2023 was observed and appeared to be in good condition (Photo 16). Scouring underneath the northern mole was also observed, which requires ongoing monitoring (Photo 17). STDC have advised Council that further</p> | | | |

maintenance works are planned to be carried out on the southern mole during the 2024-2025 financial year. The design has been completed and STDC are now seeking budget approval.

STDC also carried out an inspection of this site during the year under review. Their report was provided to Council on 30 June 2023.

Survey based monitoring summary:

Surveying the Pātea mouth and adjacent coast was carried out to identify erosional effects potentially caused by the river mouth structures (consents 4573-2 and 6839-1). TPL carried out beach profile monitoring and a multi-beam sonar survey was carried out by Fugro at the Pātea inlet and river mouth. The multi-beam surveys were carried out on 18 January, 1 February 2022 and 15 August 2022. Results of these surveys are summarized in Section 3.2.

Overall compliance assessment:

Compliant (based on the information available, as summarised above). Further degradation of the mole structures may lead to non-compliance; particularly if the structures present increased navigational hazards.



Photo 14 Eroded access from carpark to Pātea beach (13 June 2023)



Photo 15 Southern mole slumping (13 June 2023)

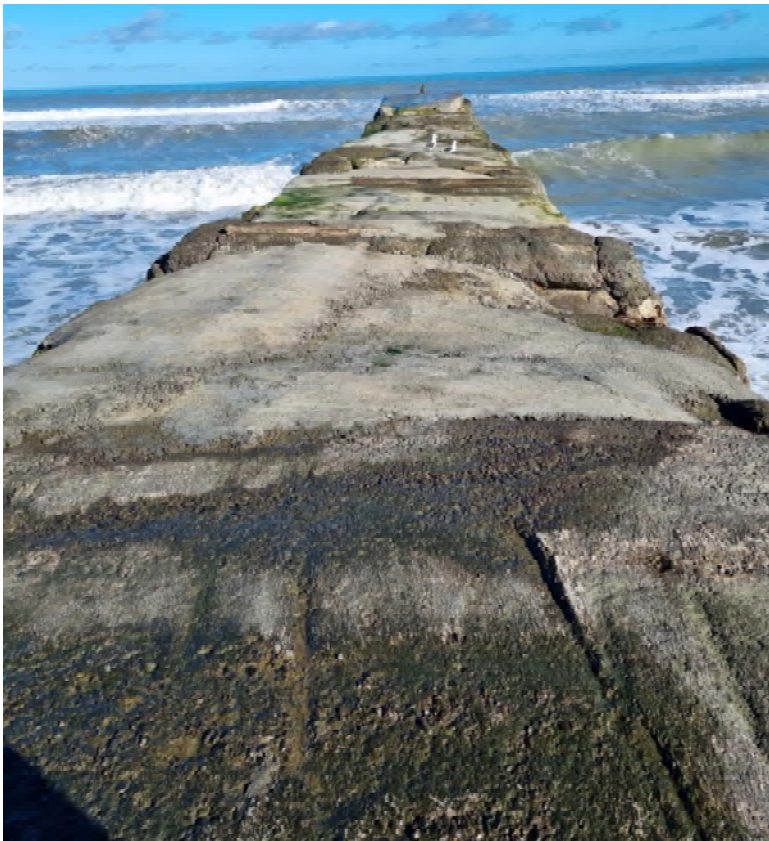


Photo 16 Recent concrete repair works on the northern mole (13 June 2023)



Photo 17 Northern mole showing scouring underneath (13 June 2023)

2.1.7 Pātea boat ramp

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 8.

Table 8 Pātea boat ramp, jetty and rock wall monitoring summary 2021-2023

| 4566-2: Pātea River boat ramp, jetty and rock wall | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------|-------------|
| Council inspection date: | 29 June 2022 13 June 2023 | STDC inspection date: | 26 May 2023 |
| Inspection summary: These structures were inspected twice by Council during the 2021–2023 period. At the time of the inspections, the structures largely appeared to be in good condition, though some minor issues were observed. The boat ramp presented some cracks on its surface, and some rocks had fallen from the rock wall onto the riverbank which needed to be repositioned back onto the structure. A few perched rocks were also observed (Photos 19 – 20) that needed repositioning as they could pose a risk to the public. The ramp was also starting to scour underneath the upper end of the jetty (Photo 18). The most severe issue is the exacerbated erosion towards the southern end of the rock wall. In this section, the structure is not serving its purpose and the scouring is extending approximately three to four meters behind the structure, towards the boating club (Photo 21). STDC also carried out an inspection of this structure during the year under review. Their report was provided to Council on 30 June 2023. STDC advised Council that there are plans to resolve the erosion behind the rock wall towards the boating club as part of an upcoming boat ramp extension project. | | | |
| Survey based monitoring summary: This structure has not been identified as requiring additional, survey based monitoring. | | | |
| Overall compliance assessment: Minor non-compliance. Pending remedial works. | | | |



Photo 18 Pātea jetty showing scouring underneath (13 June 2023)



Photo 19 Rock wall downstream of boat ramp showing displaced rocks (13 June 2023)



Photo 20 Perched rocks on rock wall downstream of boat ramp (13 June 2023)



Photo 21 Erosion behind rock wall downstream of boat ramp (13 June 2023)

2.1.8 Pātea wharf

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 9.

Table 9 Pātea wharf and boulder rip rap monitoring summary 2021-2023

| 4575-2: Pātea wharf and boulder rip rap | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------|----------------------------------------|
| Council inspection date: | 13 June 2023 | STDC inspection date: | 4 Mar 2022 (CSL) 25 May 2023 (STDC) |
| <p>Inspection summary: This structure was inspected by Council once in the 2021–2023 period. At the time of the inspection, no obvious changes from the previous year were observed. The structures were not posing any increased or immediate navigational hazards. As the structure is deteriorating (Photo 23), ongoing monitoring is required to ensure it does not present a navigational hazard to vessels. The rip rap presented some protruding posts that also require attention (Photo 22).</p> <p>STDC carried out an inspection of this structure and an additional inspection was carried out by CSL with their reports provided to the Council for review.</p> | | | |
| <p>Survey based monitoring summary: This structure has not been identified as requiring additional, survey based monitoring.</p> | | | |
| <p>Overall compliance assessment: Compliant (based on the information available, as summarised above).</p> | | | |



Photo 22 Posts protruding from rip-rap upstream of wharf (13 June 2023)



Photo 23 Collapsing section of Pātea wharf (13 June 2023)

2.1.9 Caves Beach access ramp

A summary of the monitoring carried out in 2021-2023 is presented below, in Table 10.

Table 10 Caves Beach access ramp monitoring summary 2021-2023

| 4579-2: Caves Beach access ramp | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------|----------------------|
| Council inspection date: | 13 June 2023 | STDC inspection date: | 26 April 2023 (STDC) |
| Inspection summary: At the time of the inspection, no obvious changes from the previous year were observed. The structure is in a slightly degraded state but still appears to be providing safe access to the beach (Photo 24). STDC also carried out an inspection of this structure during the year under review. Their report was provided to Council on 30 June 2023. | | | |
| Survey based monitoring summary: This structure has not been identified as requiring additional, survey based monitoring. | | | |
| Overall compliance assessment: Compliant (based on the information available, as summarised above). | | | |



Photo 24 Caves Beach access ramp (13 June 2023)

2.2 Incidents, investigations, and interventions

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

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

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

In the 2021-2023 period, the Council was not required to undertake significant additional investigations and interventions, or record incidents, in association with STDC's conditions in resource consents or provisions in Regional Plans.

3 Discussion

3.1 Discussion of structure performance

All coastal structures were compliant with consent conditions in the 2021-2023 monitoring period. Some of the structures were found to have some issues, but were still compliant with consent conditions (e.g., the Pātea moles and rock walls).

Two minor non-compliances were found. The Bayly Road seawall showed scouring, mainly around the picnic area and under the pine trees, which needs maintenance. Additionally, some perched rocks were observed. STDC has since placed fencing and danger signage near the picnic table. Further remedial works are currently being planned. The rock wall next to the Pātea River boat ramp presented exacerbated erosion. At this section, the rock wall is not serving its purpose and needs to be repaired. Repair works will be carried out as part of the boat ramp extension works.

Minor issues were observed at Middleton Bay and Pātea. Erosion throughout Middleton Bay meant that a nearby dwelling needed to be removed and warning signage installed. The access to Pātea Beach from the carpark has become hazardous due to the eroded sand dune. The moles were in a satisfactory condition, however, the eastern (left) mole requires maintenance to address the slumping sections. STDC has finalized design work and has planned construction to take place during 2024-2025. Additionally, scouring was observed underneath the right mole which needs close monitoring. The Pātea River boat ramp had some perched rocks that need attention, which will be repaired as part of the boat ramp extension works. The old Pātea wharf currently is not posing any increased navigational hazards, however, ongoing monitoring is required in case of collapse. The rip-rap has multiple poles protruding which also need to be addressed.

No issues, hazards, or changes from previous monitoring period were noted in Kaupokonui boulder rip-rap, Caves Beach access ramp or Ōpunake Bay boat ramp. Furthermore, the lattice wall at the eastern end of Ōpunake Beach that was found to be in a state of disrepair and deemed non-compliant in the previous monitoring period has since been replaced by a new concrete block structure.

3.2 Environmental effects of exercise of consents

Not all of the structures currently included in this monitoring programme have the same potential to influence or affect coastal processes. Groynes, moles and seawalls, by design, can have a measurable influence on coastal processes, whereas the same level of effects are less likely to occur with smaller structures such as boat ramps and beach access ways. Where impacts do occur, these effects can be gradual and difficult to discern from natural processes. In these instances, specific surveying methodologies are necessary to determine whether a structure is influencing coastal processes and if this is resulting in any adverse effects. For this reason, a monitoring plan was developed to ensure all coastal structures receive appropriate monitoring to detect potential impacts coastal processes going forward. This plan and subsequent revisions have been provided to Council. The plan is a working document that can be updated and revised as agreed upon by both STDC and Council. Details of monitoring sites, methodologies, frequencies, data analysis and reporting are included in the plan. Data collection has begun, with measurement-based monitoring carried out at Middleton Bay, Pātea and Ōpunake Beach. The most recent monitoring results have been analysed and presented in an updated monitoring report that was provided to Council on 22 June 2023. A summary of the key findings is provided below.

Measurement based monitoring results found evidence of between 0.9 – 2.8 m erosion across the beach profile monitoring sites in Middleton Bay. These results show an increase in the shoreline retreat and could indicate that an episode of erosion is underway. Higher erosion fronting the revetment was attributed to the increased wave reflection and turbulence during the preceding storms.

At Pātea, changes in subtidal bathymetry (net erosion/deposition) were assessed by comparing the 2022 multibeam survey and earlier 2003 single beam survey. The report concluded that the erosional trend to the west of the Pātea mouth is likely a result of littoral drift. Results were consistent with erosion-deposition-erosion (process-response) patterns that are well recognized in morphodynamic systems. Three beach profiles were assessed which further illustrate these changes.

Beach profile surveys at Ōpunake Beach showed minor erosion at transects 1 and 2 (0.2 - 0.1 m respectively). The three transects fronting the retaining wall structure showed patterns of diminished accretion (shoreline seaward advance), accretion to erosion and erosion to accretion, respectively. Additionally, a bathymetric survey of Ōpunake Bay was carried out on 26 and 27 January 2023. In this survey, the remnants of the partially removed artificial surfing reef were evident. A band of substantial net erosion closer to the intertidal beach was discovered. However, it remains unclear whether this is part of a short term natural system fluctuation or whether it is indicative of a longer term trend.

None of the monitored structures had definitive adverse effects on their surrounding environments, based on the observations and measurement-based monitoring during the period under review. A copy of the full monitoring report is available from Council and/or STDC upon request.

3.3 Evaluation of performance

A summary of STDC's compliance record for the period under review is provided in Tables 11-23.

Table 11 Summary of performance for Consent 4566-2 at Pātea

| Purpose: To occupy the coastal marine area with a boat ramp and jetty | | |
|------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Boat ramp and jetty to be maintained in a safe and sound condition | Inspections | Minor non-compliance |
| 2. Structure to be removed if no longer required | | N/A |
| 3. Optional review of consent | No further reviews | N/A |
| Overall assessment of environmental performance in respect of this consent | | Good |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 12 Summary of performance for Consent 4573-2 at Pātea (superseded on 19 August 2022)

| Purpose: To place and maintain training groynes, seawalls and training walls | | |
|---------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Authorises occupation and maintenance works of structures in the Pātea River Mouth | | N/A |
| 2. Maintain the structures in a safe and sound state | Inspection | Yes |
| 3. Optional review of consent | Next scheduled June 2028, if required | N/A |

| Purpose: To place and maintain training groynes, seawalls and training walls | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 13 Summary of performance for Consent 4573-2.1 at Pātea (granted on 19 August 2022)

| Purpose: To place and maintain training groynes, seawalls and training walls | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Structures are maintained in a safe and sound state | Inspections | N/A |
| 2. Structure shall not cause significant erosion of the foreshore or seabed | Inspections and MBM | Yes |
| 3. Monitoring undertaken in accordance with a Monitoring Plan | Monitoring Plan | Yes |
| 4. Consent holder shall, undertake an investigation to determine cause and identify options to avoid, remedy or mitigate the adverse effects of erosion. | Not required to carry out further investigations during the year | N/A |
| 5. Optional review of consent | Next scheduled June 2028, 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 |

N/A = not applicable

Table 14 Summary of performance for Consent 4575-2 at Pātea

| Purpose: To occupy the CMA with a derelict wharf | | |
|-----------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Consent holder to maintain the 200 m of rip-rap in a safe and sound condition. | Inspections | Yes |
| 2. Consent holder to maintain structure to minimum standards, preventing navigational hazards | Inspections | Yes |
| 3. Optional review of consent | No further reviews | N/A |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 15 Summary of performance for Consent 4578-2 at Ōpunake Beach

| Purpose: To occupy coastal space with retaining walls and associated structures | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Consent holder to maintain structure to satisfaction of Council | Inspections | Yes |
| 2. Annual recording of the condition of the structure and surrounds | Inspections | Yes |
| 3. Structure to be removed if no longer required | | N/A |
| 4. Review | Scheduled for June 2024, not required | N/A |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 16 Summary of performance for Consent 4579-2 at Caves Beach

| Purpose: To occupy the CMA with a public access ramp | | |
|----------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Consent holder to maintain ramp to satisfaction of Council | Inspections | Yes |
| 2. 24 hours notification required prior to undertaking maintenance works | | N/A |
| 3. Optional review of consent | No further reviews | N/A |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 17 Summary of performance for Consent 5504-2 at Middleton Bay

| Purpose: To occupy the CMA with an existing boulder rip rap seawall | | |
|----------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Any change to the scale or nature of the structure must be authorised | | N/A |
| 2. Consent holder to maintain the structure in a safe and sound state | Inspections | Yes |
| 3. The structure shall not increase erosion or coastal hazard risk | Monitoring Plan developed and updated | N/A |

| Purpose: To occupy the CMA with an existing boulder rip rap seawall | | |
|---------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 4. Consent holder to undertake a visual inspection once per year and following large storm events | Consent holder correspondence | Yes |
| 5. Optional review of consent | Scheduled for June 2024, not required | N/A |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 18 Summary of performance for Consent 5512-2 at Bayly Road

| Purpose: To occupy the CMA with a boulder rip rap seawall | | |
|----------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Any change to the scale or nature of the structure must be authorised | Inspection | Yes |
| 2. Structure is maintained in a safe and sound condition | Inspection | Minor non-compliance |
| 3. Review | Next scheduled for June 2025, if required | N/A |
| Overall assessment of environmental performance in respect of this consent | | Good |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 19 Summary of performance for Consent 5983-2 at the Kaupokonui Stream

| Purpose: To occupy the true left bank of the Kaupokonui Stream with a rock rip rap | | |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Any change to scale or nature of structure to require formal authorisation | No change | N/A |
| 2. Structure shall be maintained in safe and sound condition | Site inspections | Yes |
| 3. Notification when undertaking maintenance | No maintenance undertaken | N/A |
| 4. Review | Next scheduled for June 2029, 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 |

N/A = not applicable

Table 20 Summary of performance for Consent 6791-1 at Ōpunake Bay

| Purpose: To erect, place and maintain a boat ramp and rock breakwater | | |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------|-----------------------------|
| Condition requirement | Means of monitoring during period under review | Compliance achieved? |
| 1. Exercise of consent in accordance with documentation submitted in application | Site inspections | Yes |
| 2. 48 hours notification required prior to construction and upon completion of maintenance works | No maintenance undertaken during period under review | N/A |
| 3. Best practicable option to minimise environmental effects | Site inspections | Yes |
| 4. Volume and area of disturbance minimised | | N/A |
| 5. No re-fuelling of machinery in coastal marine area | | N/A |
| 6. Optional review of consent | No further reviews | N/A |
| Overall assessment of environmental performance in respect of this consent | | High |
| Overall assessment administrative performance in respect of this consent | | High |

N/A = not applicable

Table 23 Evaluation of environmental performance over time

| Year | High | Good | Improvement req | Poor |
|-------------|-------------|-------------|------------------------|-------------|
| 2011 | - | ✓ | - | - |
| 2012 | ✓ | - | - | - |
| 2013 + 2014 | - | ✓ | - | - |
| 2015 | - | ✓ | - | - |
| 2016 | - | ✓ | - | - |
| 2017 | - | ✓ | - | - |
| 2018 | - | ✓ | - | - |
| 2019 | - | ✓ | - | - |
| 2020 | ✓ | - | - | - |
| 2021 | ✓ | - | - | - |
| 2023 | ✓ | - | - | - |
| Totals | 4 | 7 | 0 | 0 |

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

3.4 Recommendations from the 2020-2021 Annual Report

In the 2020-2021 Annual Report, it was recommended:

1. THAT monitoring of the STDC coastal structures shall be undertaken in accordance with the requirements set out in Section 3.5 of this Compliance Report, and as stipulated in the Draft Monitoring Plan provided to Council on 30 June 2021 (TRC document 2813897).
2. THAT the Denby Road (Waihi Beach) beach access structure is no longer monitored and reported on, on the basis that the structure has been removed.
3. THAT STDC shall comply with Rule 36 (structure maintenance, minor alteration or minor extension) in the Proposed Coastal Plan for Taranaki if maintenance is required on any consented coastal structures.
4. THAT should there be issues with environmental or administrative performance in 2022-2023, monitoring may be adjusted to reflect any additional investigation or intervention as found necessary.
5. THAT the option for a review of resource consent 4573-2 in June 2022, as set out in condition 3 of the consent, be exercised, on the grounds that the consent is currently inadequate to prevent adverse environmental effects as it does not necessitate appropriate monitoring to determine the effects of the structures.

These recommendations were implemented during the monitoring period under review.

3.5 Alterations to monitoring programmes for 2023-2025

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.

There are no planned changes for 2023-2025 monitoring programme.

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 2023-2025.

3.6 Exercise of optional review of consent

Resource consents 4578-2 (Condition 4) and 5504-2 (Condition 5) provide for an optional review of the consent in June 2024 if there are grounds that the conditions are currently inadequate to prevent adverse environmental effects from occurring. Based on results from monitoring in previous years and this monitoring period, a review of consents 4578-2 and 5504-2 is not required.

4 Recommendations

1. THAT in the first instance, monitoring of STDC's consented coastal structures in the 2023-2025 period continue at the same level as in 2021-2023.
2. THAT should there be issues with environmental or administrative performance in 2021-2023, monitoring may be adjusted to reflect any additional investigations or interventions as deemed necessary.
3. THAT the option for a review of resource consent(s) in June 2024, as set out in condition 5 of the consent 5504-2, and condition 4 of consent 4578-2 not to be exercised, on the grounds that it is not required.
4. THAT STDC shall comply with Rule 40 (structure maintenance, minor alteration or minor extension) in the Coastal Plan for Taranaki if maintenance is required on any consented coastal structures.

Glossary of common terms and abbreviations

The following abbreviations and terms are used within this report:

| | |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CMA | Coastal Marine Area. |
| 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. |
| Lithology | The scientific study of rocks. |
| MLWS | Mean low water springs, the lowest of the low tides. |
| Mole | A massive structure, usually of stone, used as a pier, jetty, breakwater, or junction between places separated by water. |
| 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 | Structures placed on banks or cliffs in such a way as to absorb the energy of incoming water. |
| Rip rap | A type of revetment style using loose but interlocked boulders. |
| RMA | Resource Management Act 1991 and subsequent amendments. |

Bibliography and references

- Duffill Watts & King Ltd, 2006. Coastal Permit Application to Taranaki Regional Council for the Pātea River Training Wall Rehabilitation. Report prepared for South Taranaki District Council.
- Gibb, Dr. J.G. (1998). A coastal management plan for Middleton Bay, Ōpunake, South Taranaki District'. Report prepared for the South Taranaki District Council.
- Ministry for the Environment. 2018. Best Practice Guidelines for Compliance, Monitoring and Enforcement under the Resource Management Act 1991. Wellington: Ministry for the Environment.
- Taranaki Regional Council. (1994). Regional Policy Statement for Taranaki.
- Taranaki Regional Council. (1997). Regional Coastal Plan for Taranaki.
- Taranaki Regional Council, (2007). STDC Coastal Structures Monitoring Programme Monitoring Report 2002-2007. Technical Report 2007-74.
- Taranaki Regional Council, (2008). STDC Coastal Structures Monitoring Programme Monitoring Report 2007-2008. Technical Report 2008-43.
- Taranaki Regional Council, (2009). STDC Coastal Structures Monitoring Programme Monitoring Report 2008-2009. Technical Report 2008-77.
- Taranaki Regional Council, (2010). STDC Coastal Structures Monitoring Programme Monitoring Report 2009-2010. Technical Report 2010-81.
- Taranaki Regional Council, (2011). STDC Coastal Structures Monitoring Programme Monitoring Report 2010-2011. Technical Report 2011-52.
- Taranaki Regional Council, (2012). STDC Coastal Structures Monitoring Programme Monitoring Report 2011-2012. Technical Report 2012-56.
- Taranaki Regional Council, (2014). STDC Coastal Structures Monitoring Programme Monitoring Report 2012-2014. Technical Report 2014-97.
- Taranaki Regional Council, (2015). STDC Coastal Structures Monitoring Programme Monitoring Report 2014-2015. Technical Report 2015-94.
- Taranaki Regional Council, (2016). STDC Coastal Structures Monitoring Programme Monitoring Report 2015-2016. Technical Report 2016-45.
- Taranaki Regional Council, (2017). STDC Coastal Structures Monitoring Programme Monitoring Report 2016-2017. Technical Report 2017-85.
- Taranaki Regional Council, (2018). STDC Coastal Structures Monitoring Programme Monitoring Report 2017-2018. Technical Report 2018-10.
- Taranaki Regional Council, (2019). STDC Coastal Structures Monitoring Programme Monitoring Report 2018-2019. Technical Report 2019-27.
- Taranaki Regional Council, (2020). STDC Coastal Structures Monitoring Programme Monitoring Report 2019-2020. Technical Report 2020-54.
- Taranaki Regional Council, (2021). STDC Coastal Structures Monitoring Programme Monitoring Report 2020-2021. Technical Report 2021-52.
- Todd, D. (2004). Taranaki Regional Council Coastal Survey Procedures Manual (Draft Copy). DTech Consulting.
- Tonkin & Taylor Ltd. (2001). Taranaki Regional Council. Compliance Monitoring Programme for Coastal Structures. Unpublished Report to the Taranaki Regional Council.

Tonkin & Taylor Ltd. (2014). Taranaki Regional Council. Coastal Structure Monitoring Specification.
Unpublished Report to the Taranaki Regional Council.

Appendix I

Resource consents held by STDC

(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.

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
HAWERA 4640

Consent Granted
Date: 23 June 2010

Conditions of Consent

Consent Granted: To occupy the coastal marine area with a boat ramp and
jetty in the lower Patea River at or about (NZTM)
1727515E-5596787N

Expiry Date: 1 June 2028

Review Date(s): June 2016, June 2022

Site Location: Patea Beach Settlement, Turi Street, Patea

Legal Description: Adjacent to Pt Lot 6 DP 648 Blk VI Carlyle SD

Catchment: Tasman Sea
Patea

General condition

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

Special conditions

1. The consent holder shall maintain the structure in a safe and sound condition, so that it continues to function effectively as an access ramp.
2. The structures authorised by this consent shall be removed and the area reinstated, if and when the structures are no longer required. A further resource consent may be required to authorise removal of the structures and the consent holder is advised to seek advice from the Council on this matter.
3. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2016 and/or June 2022 for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 23 June 2010

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of Consent Holder: South Taranaki District Council
Private Bag 902
Hawera 4640

Decision Date: 7 June 2016

Commencement Date: 7 June 2016

Conditions of Consent

Consent Granted: To occupy the coastal marine area of the Patea River mouth with the following existing structures the:

- River Mouth Training Groynes, comprising the North mole (west) and South mole (east);
- Rock Training Wall;
- Mana Bay Seawall;
- Wave Guide Wall; and
- Carlyle Beach Rock Protection Works

Expiry Date: 1 June 2034

Review Date(s): June 2022, June 2028

Site Location: Patea River Mouth, Patea

Grid Reference (NZTM) 1727464E-5596442N to 1727575E-5596430N
(Mana bay Seawall)
1727537E-5596353N to 1727584E-5596471N
(Wave Guide Wall)
1727575E-5596430N to 1727605E-5596621N
(Carlyle Beach Wall)
1727645E-5596408N to 1727684E-5596835N
(Rock Training Wall)
1727645E-5596408N to 1727390E-5596098N (East Mole)
1727367E-5596176N to 1727464E-5596442N (West Mole)

Catchment: Patea
Tasman Sea

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

General condition

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

Special conditions

1. This consent authorises the occupation and associated maintenance works, in the coastal management area, for the existing structures at the Patea River Mouth including the:
 - River mouth training groynes;
 - Rock training wall;
 - Mana Bay Seawall;
 - Wave Guide Wall; and
 - Carlyle Beach Rock Protection Works.
2. The consent holder shall maintain the structure in a safe and sound state so that it continues to function effectively for its intended purpose.
3. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2022 and/or June 2028 for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 7 June 2016

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
HAWERA 4640

Consent Granted
Date: 23 June 2010

Conditions of Consent

Consent Granted: To occupy the coastal marine area with a derelict wharf
and 200 metres of rock rip-rap on the true left bank of the
Patea River at or about (NZTM) 1727237E-5597970N

Expiry Date: 1 June 2028

Review Date(s): June 2016, June 2022

Site Location: Portland Quay, Patea

Legal Description: Adjacent to Lot G DP 2739

Catchment: Tasman Sea
Patea

General condition

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

Special conditions

1. The consent holder shall maintain the 200 metres of rock rip-rap in a safe and sound condition, so that it continues to function effectively as a coastal protection structure.
2. The consent holder shall maintain the derelict wharf in an intact state to the extent that no part of it becomes a navigational hazard.
3. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2016 and/or June 2022 for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 23 June 2010

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
HAWERA 4640

Decision Date: 29 October 2012

Commencement
Date: 29 October 2012

Conditions of Consent

Consent Granted: To occupy coastal space with retaining walls and
associated accessway structures in the coastal marine
area of Opunake Beach between (NZTM)
1673576E-5632109N and 1673836E-5631940N

Expiry Date: 1 June 2030

Review Date(s): June 2018, June 2024

Site Location: Beach Road, Opunake

Legal Description: Rec reserve adjacent to Secs 1-7 Blk XLVII Tn of Opunake
(Site of structure)

Catchment: Tasman
Hihiwera

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

General condition

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

Special Conditions

1. The consent holder shall maintain the structures in a safe and sound condition, so that they continue to function effectively as retaining structures and accessways, to the satisfaction of the Chief Executive, Taranaki Regional Council.
2. The consent holder shall record annually the condition of the structures and the immediate surrounding area.

Note: Compliance with special condition 2 would be achieved by taking photographs at appropriate sites annually. This work will be undertaken by the Taranaki Regional Council through the monitoring programme.

3. The structures authorised by this consent shall be removed and the area reinstated, if and when the structures are no longer required. A further resource consent may be required to authorise removal of the structures and the consent holder is advised to seek advice from the Taranaki Regional Council on this matter.
4. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2018, and/or June 2024, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects of the structures on the environment, arising from the exercise of this consent.

Signed at Stratford on 29 October 2012

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
HAWERA 4640

Consent Granted
Date: 23 June 2010

Conditions of Consent

Consent Granted: To occupy the coastal marine area with a public access
ramp at or about (NZTM) 1740080E-5589471N

Expiry Date: 1 June 2028

Review Date(s): June 2016, June 2022

Site Location: Caves Beach, Waverley

Legal Description: Lot 1 DP 9646

Catchment: Tasman Sea

General condition

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

Special conditions

1. The consent holder shall maintain the structure in a safe and sound condition, so that it continues to function effectively as an access ramp.
2. The structures authorised by this consent shall be removed and the area reinstated, if and when the structures are no longer required. A further resource consent may be required to authorise removal of the structures and the consent holder is advised to seek advice from the Council on this matter.
3. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2016 and/or June 2022 for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 23 June 2010

For and on behalf of
Taranaki Regional Council

Director-Resource Management

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

Name of Consent Holder: South Taranaki District Council
Private Bag 902
Hawera 4640

Decision Date: 7 June 2016

Commencement Date: 7 June 2016

Conditions of Consent

Consent Granted: To occupy the coastal marine area of the Patea River mouth with the following existing structures the:

- River Mouth Training Groynes, comprising the North mole (west) and South mole (east);
- Rock Training Wall;
- Mana Bay Seawall;
- Wave Guide Wall; and
- Carlyle Beach Rock Protection Works

Expiry Date: 1 June 2034

Review Date(s): June 2022, June 2028

Site Location: Patea River Mouth, Patea

Grid Reference (NZTM) 1727464E-5596442N to 1727575E-5596430N
(Mana bay Seawall)
1727537E-5596353N to 1727584E-5596471N
(Wave Guide Wall)
1727575E-5596430N to 1727605E-5596621N
(Carlyle Beach Wall)
1727645E-5596408N to 1727684E-5596835N
(Rock Training Wall)
1727645E-5596408N to 1727390E-5596098N (East Mole)
1727367E-5596176N to 1727464E-5596442N (West Mole)

Catchment: Patea
Tasman Sea

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

General condition

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

Special conditions

1. This consent authorises the occupation and associated maintenance works, in the coastal management area, for the existing structures at the Patea River Mouth including the:
 - River mouth training groynes;
 - Rock training wall;
 - Mana Bay Seawall;
 - Wave Guide Wall; and
 - Carlyle Beach Rock Protection Works.
2. The consent holder shall maintain the structure in a safe and sound state so that it continues to function effectively for its intended purpose.
3. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2022 and/or June 2028 for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 7 June 2016

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
Hawera 4640

Decision Date 29 August 2019

Commencement Date 29 August 2019

Conditions of Consent

Consent Granted: To occupy the coastal marine area of the Middleton Bay foreshore with an existing boulder riprap seawall, for erosion protection purposes

Expiry Date: 1 June 2036

Review Date(s): June 2024, June 2030

Site Location: Middleton Bay Reserve, Opunake

Grid Reference (NZTM) Between 1673036E-5632356N & 1673031E-5632472N

Catchment: Tasman Sea

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

General condition

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

Special conditions

1. This consent authorises the occupation of space in the Coastal Marine Area by the protection structure existing at the time the application for this consent was lodged, and as described in the application. Any change to the nature or scale of the structure may need to be authorised by a formal process in accordance with the Resource Management Act, 1991.
2. The consent holder shall maintain the structure in a safe and sound state such that:
 - a. it does not fall into a state of disrepair and continues to function effectively for the purpose it was designed;
 - b. its structural integrity is maintained; and
 - c. there is no settlement or loss of foundation material.
3. The structure shall not:
 - a. cause erosion that is greater than that assessed when determining the application for this consent; or
 - b. significantly increase the coastal hazard risk.
4. The consent holder shall undertake a visual inspection of the structure at least once a year, and immediately following a large storm event. Within 20 working days of the inspection, the consent holder shall provide a report to the Chief Executive, Taranaki Regional Council that addresses the matters in conditions 2 and 3 above.
5. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2024 and/or June 2030, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 29 August 2019

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of Consent Holder: South Taranaki District Council
Private Bag 902
Hawera 4640

Decision Date: 4 February 2016

Commencement Date: 4 February 2016

Conditions of Consent

Consent Granted: To occupy the Coastal Marine Area with a boulder rip rap seawall on the foreshore at Bayly Road Beach for coastal erosion protection purposes

Expiry Date: 1 June 2031

Review Date(s): June 2019, June 2025

Site Location: Coast Road, Pungarehu

Legal Description: Lot 1 DP 16474 (Site of structure)

Grid Reference (NZTM) 1666948E-5655952N

Catchment: Tasman Sea

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

General condition

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

Special conditions

1. This consent authorises the occupation of space in the Coastal Marine Area by the protection structure existing at the time the application for this consent was lodged, and as described in the application. Any change to the nature or scale of the structure may therefore need to be authorised by a formal process in accordance with the Resource Management Act, 1991.
2. The consent holder shall maintain the structure in a safe and sound condition, so that it continues to function effectively. Maintenance shall include removing any backfill material displaced onto the foreshore.
3. The Taranaki Regional Council may review any or all of the conditions of this consent by giving notice of review during the month of June 2019 and/or June 2025, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects of the structures on the environment, arising from the exercise of this consent.

Signed at Stratford on 4 February 2016

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of Consent Holder: South Taranaki District Council
Private Bag 902
Hawera 4640

Decision Date: 30 January 2018

Commencement Date: 30 January 2018

Conditions of Consent

Consent Granted: To occupy the coastal space associated with rock riprap on the true left bank of the Kaupokonui Stream within the Coastal Marine Area for erosion control purposes

Expiry Date: 1 June 2035

Review Date(s): June 2023, June 2029

Site Location: 13b Kaupokonui Heads Road, Kaupokonui

Grid Reference (NZTM) Between 1691144E-5619995N & 1691146E-5619813N

Catchment: Kaupokonui

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

General condition

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

Special conditions

1. This consent authorises the ongoing use and occupation of the protection structure existing at the time the application for this consent was lodged, and as described in the application. Any change to the nature or scale of the structure may therefore need to be authorised by a formal process in accordance with the Resource Management Act, 1991.
2. The consent holder shall maintain the structure in a safe and sound condition such that it continues to function effectively as a protection structure.
3. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 1 working day prior to the commencement of any maintenance work. Notification shall include the consent number and a brief description of the activity consented and be emailed to worknotification@trc.govt.nz.
4. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2023 and/or June 2029, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 30 January 2018

For and on behalf of
Taranaki Regional Council

A D McLay
Director - Resource Management

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

Name of
Consent Holder: South Taranaki District Council
Private Bag 902
HAWERA 4800

Consent Granted
Date: 22 December 2005

Conditions of Consent

Consent Granted: To erect, place and maintain a boat ramp and rock
breakwater in the coastal marine area off the northern
headland of Opunake Bay at or about GR: P20:830-936

Expiry Date: 1 June 2024

Review Date(s): June 2012, June 2018

Site Location: Northern Headland, Opunake Bay, Opunake

Legal Description: Lot 2 DP 9250 Secs 1-3 SO 13535 Pt Sub Sec 1 Town of
Opunake - Pt Utility Res Secs 1-3 SO 13535 Esplanade
Res

Catchment: Tasman Sea

General conditions

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

Special conditions

1. The exercise of this consent shall be undertaken generally in accordance with the documentation submitted in support of application 4084. In the case of any contradiction between the documentation submitted in support of application 4084 and the conditions of this consent, the conditions of this consent shall prevail.
2. The consent holder shall notify the Chief Executive, Taranaki Regional Council, in writing at least 48 hours prior to the commencement and upon completion of the initial works, and again at least 48 hours prior to and upon completion of any subsequent maintenance works which would involve disturbance of or deposition to the seabed or discharges to water.
3. The consent holder shall undertake all practicable measures to prevent the discharge or placement of silt and/or organics and/or cement products and/or any other contaminant into the sea, and to minimise the disturbance of the foreshore and seabed.
4. The consent holder shall ensure that the area and volume of foreshore and seabed disturbance shall, so far as practicable, be minimised and any areas which are disturbed shall, so far as practicable, be reinstated.
5. There shall be no refuelling of construction machinery within the coastal marine area.

Consent 6791-1

6. In accordance with section 128 and section 129 of the Resource Management Act 1991, the Taranaki Regional Council may serve notice of its intention to review, amend, delete or add to the conditions of this resource consent by giving notice of review during the month of June 2012 and/or June 2018, for the purpose of ensuring that the conditions are adequate to deal with any adverse effects on the environment arising from the exercise of this resource consent, which were either not foreseen at the time the application was considered or which it was not appropriate to deal with at the time.

Signed at Stratford on 22 December 2005

For and on behalf of
Taranaki Regional Council

Director-Resource Management

