



Environment Canterbury Patrol Records 2016-2018



Prepared by Policy and Strategy



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Executive Summary

This report presents the findings of the Environment Canterbury Ranger Service that is contracted to patrol the coastal area of Northern Pegasus Bay that is managed by the Waimakariri District Council.

The report is part of a wider research and monitoring programme led by the Waimakariri District Council to assess the effectiveness of the Northern Pegasus Bay Bylaw 2016.

This report will form the basis of an ongoing annual monitoring programme that records baseline information on the number, and specific type of Bylaw breaches that occur along the Northern Pegasus Bay coastline. It will focus on the information collected by the Ranger Service since the implementation of the Bylaw in August 2016 to the end of 2018.

Environment Canterbury is contracted to provide ranger services from an agreed schedule for a fixed number of patrol days each year. Rangers enter relevant incidents into a smart phone application that creates a database of job and information logs from which an external spreadsheet can be exported.

In the database, a single entry of information into the database is referred to as a “patrol record” and a breach of the Bylaw is referred to as an “incident”.

Key Findings

- There were 264 patrol records in 2016, 535 in 2017 and 680 in 2018.
- Overall, there were 70 incidents in 2016, 147 in 2017, and 233 in 2018.
- The proportion of patrol records with incidents has increased from 27% in 2016 to 34% in 2018.
- Nearly all sites managed by the Council have experienced an increase in the proportion of incidents since 2017. This includes Kairaki, the Ocean Outfall, Woodend Beach, Pegasus Beach, and the Ashley-Rakahuri Estuary. However, Pines Beach and Waikuku Beach have decreased slightly.
- The increase for some sites is likely due to a change in the patrol schedule which sought to target times and days where incidents were more likely to occur.



Ashley-Rakahuri Estuary

- Vehicles in prohibited areas accounted for the highest proportion of Bylaw breaches.
- The sites with the highest proportion of incidents between 2016 and 2018 were Kairaki, the Ocean Outfall, Pines Beach and the Ashley-Rakahuri Estuary.
- The sites that recorded the highest proportion of vehicles in prohibited areas were the Ocean Outfall, Pines Beach and Kairaki.
- All other recorded incidents accounted for 4% or less of the patrol records.

A number of recommendations can be made from this research. These are as follows:

- Maintain regular reporting of the Environment Canterbury Ranger Service records to track incidents and the effectiveness of patrols across time.
- Improve data entry for patrol records (particularly location data) to reduce the number of unspecified location records and reduce the overrepresentation of incidents.
- Establish baselines for sites and specific breaches from the results of this report.
- Target patrols toward Kairaki, Pines Beach and the Ocean Outfall as these account for the highest proportion of Bylaw incidents. This should also include the Ashley-Rakahuri estuary because of its high ecological values.

Introduction

This report presents the findings of the Environment Canterbury Ranger Service (ECRS) patrol that operates along the coastline of Northern Pegasus Bay.

The report is part of a wider research and monitoring programme led by the Waimakariri District Council (WDC, or Council) to assess the effectiveness of the Northern Pegasus Bay Bylaw 2016 (NPBB 2016, or the Bylaw).

The ECRS is contracted by the Council to monitor the area that is governed by the NPBB 2016. This is an important service as it helps to monitor the coastline for activities that may breach the Bylaw rules, and also acts as an effective tool in raising public awareness of the NPBB 2016 to ensure all recreational activities are compliant.

The main purposes of the ECRS is to:

- Enhance coastal visitor enjoyment,
- Provide for visitor safety, and,
- Monitor, and if necessary, correct visitor behaviour through education and enforcement of the NPBB 2016.

Purpose

This report will form the basis of an ongoing annual monitoring programme that records baseline information on the number and specific type of Bylaw breaches. This applies to the area of the Northern Pegasus Bay coastline under the jurisdiction of the WDC.

This report will allow Council to understand the effectiveness of the ECRS. It will also help to identify the effectiveness of the patrol method.

As this is the first report, it will summarise all the previous years since the Bylaw was implemented, which includes 2016, 2017 and 2018.

Patrol method of ECRS

Patrols occur along the stretch of coastline managed by WDC. The area of coastline extends

from the mouth of the Waimakariri River to Ashworths Beach. The exact route of the patrol is done at the discretion of the ECRS and may vary with different beginning and end points. Rangers enter any relevant incidents into a smart phone application that creates a database of job and information logs from which an external spreadsheet can be exported.

Rangers enter multiple records per day, identifying breaches along the area under Bylaw protection. At the end of each month, a report of the events is submitted to Waimakariri District Council. The reports are also presented at the Northern Pegasus Bay Advisory Group (NPBAG) at its three monthly meetings. At the conclusion of a patrol year, the database is sent from Environment Canterbury (ECan) to Council for analysis.

Key Definitions

This report uses the following definitions:

Patrol: A patrol of the coastline by the ECRS that occurs anywhere between Kairaki Beach (Waimakariri River Mouth) and Ashworths Beach, North of the Ashley-Rakahuri Estuary. Patrols are not linear, and may occur randomly at the discretion of the ECRS, or as incidents are reported by members of the public or other organisations (e.g. Te Kōhaka o Tūhaitara Trust).

Patrol day: A single day, out of the total number of patrol days, that are budgeted for each year.

Patrol year: The year from the 1st of January, to the 31st of December. This is the case for all years with the exception of 2016, where the patrol year began after the implementation of the Bylaw on the 15th of August and concluded on the 31st of December. In the context of this report, the patrol year is not considered in the same period as the financial year.



Patrol record: The information entered into the database about a site that refers to an incident or a non-incident.

Incident: A patrol record that records a breach of the Bylaw rules, or any other negative notifiable event.

Non-incident: A patrol record that acknowledges the site is “all clear” or an entry where no incidents have occurred.

Limitations

It is important to acknowledge the limitations of this data. These are as follows:

Inconsistent data entry

One is the potential for inconsistent data entry, which could be the case for some sites. For example, in discussions with Council, the ECRS reported that “all clear” signals or non-incident patrol records are not consistently entered. This may lead to an overrepresentation of Bylaw breaches at some sites.

Accuracy of patrol records

A second limitation is that the accuracy of data entry may not be consistent between rangers.

In discussions with the ECRS they discussed the possibility that some rangers may have recorded the names of sites incorrectly. This applied mostly to sites such as Kairaki, Pines Beach, or the Ocean Outfall.

Multiple record entry

Another limitation is that in some cases, the details of one breach has been entered multiple times into the patrol records. This is often the case for more serious Bylaw breaches. This can raise both the number and proportion of patrol records with an incident occurring.

These issues can create problems in the analysis, as both incidents and non-incidents are not accurately recorded. In order to prevent this, data entry should be consistent between rangers and sites should be carefully recorded. However, it is important to note that any changes in the method of patrols or patrol records will have a direct effect on the data presented in the next annual report.

Overview

This section provides an overview of patrols, incidents, and the specific Bylaw breaches across all sites.

Table One: Total Patrol Days

Table one displays the total number of patrol records, the number of contracted patrol days, and the average number of patrol records per day for years 2017 and 2018. The data for 2016 is unavailable due to the new Bylaw rules being implemented in mid-August of that year.

Patrols days are subject to changes in funding and staff allocation (e.g. more than one staff member on a single patrol for safety reasons). The average number of patrol records per day is calculated by dividing the total number of patrol records by the number of contracted patrol days per year.

In 2017, there was an average of 4.5 patrol records per day and this increased to 6.8 per day in 2018.

Year	No. of Patrol Records	No. of Contracted Patrol Days	Average Patrol Records Per Day
2016	264	Unknown	Unknown
2017	535	117.5	4.5
2018	680	100	6.8



Table Two: Total Patrol Records for Each Site

Table two displays the total number of patrol records for each site from years 2016 to 2018.

Overall, the number of patrol records has increased for all sites since 2016.

Kairaki (168) and the Ocean Outfall (112) had the highest number of records compared to other sites. This is likely due to the ECRS focusing its efforts on these areas where incidents were occurring.

Location	2016	2017	2018
Kairaki	60	103	168
Pines Beach	7	44	55
Ocean Outfall	35	65	112
Woodend Beach	45	63	74
Pegasus Beach	12	37	51
Waikuku Beach	15	54	77
Ashley-Rakahuri Estuary	69	99	84
North of Estuary	12	25	26
Unspecified locations	9	44	33

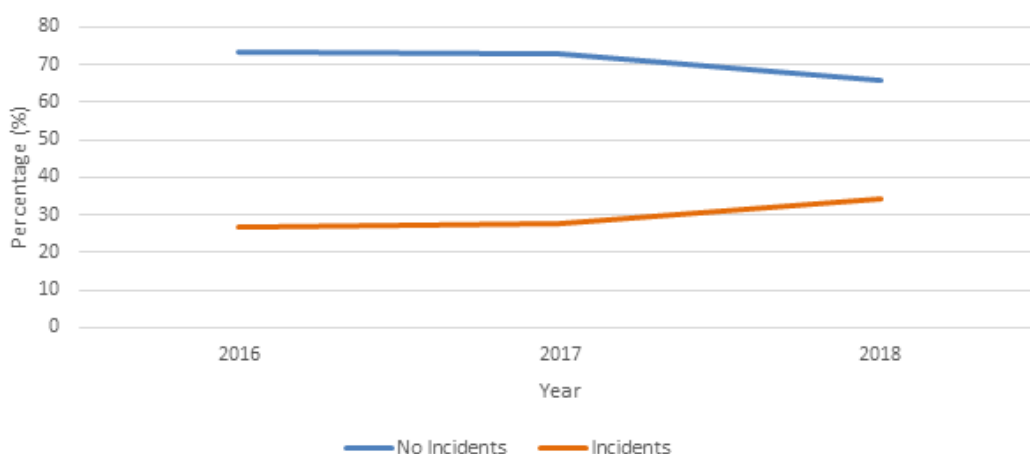
No Incidents Versus Incidents

Figure one displays the number of patrol records with no incidents versus the number of patrol records with incidents for years 2016 to 2018.

In 2016, 73% of patrol records reported no incidents compared to 27% that reported incidents and this remained relatively constant in 2017. However, in 2018 the percentage of no incidents decreased to 66% and the number of incidents increased to 34%.

In total, between 2016 and 2017, the number of incidents or breaches of the NPBB 2016 increased by 1%. Between 2017 and 2018 it increased by another 6%.

Figure 1: Percentage of Patrol Records with no Incidents Versus Patrol Records with Incidents



Total Patrol Records and Incidents

Figure two displays the total number of patrol records, the total number of incidents, and the proportion of incidents across all sites. The number of patrol records and the number of incidents correlates to the left hand axis and the proportion of patrol records with an incident correlates to the right hand axis.

It is important to record the proportion of patrol records with an incident as this highlights the difference between the number of incidents versus the actual proportion of incidents. For example, if the number of incidents increases, but the overall proportion of incidents decreases, this may be a desirable result. In this instance, it would suggest that there have been more patrols, and less incidents discovered.

Conversely, if fewer incidents are discovered, but there is physical or anecdotal evidence that suggests incidents are occurring, a change to the patrol method may be required (e.g. patrolling at different times or in different locations).

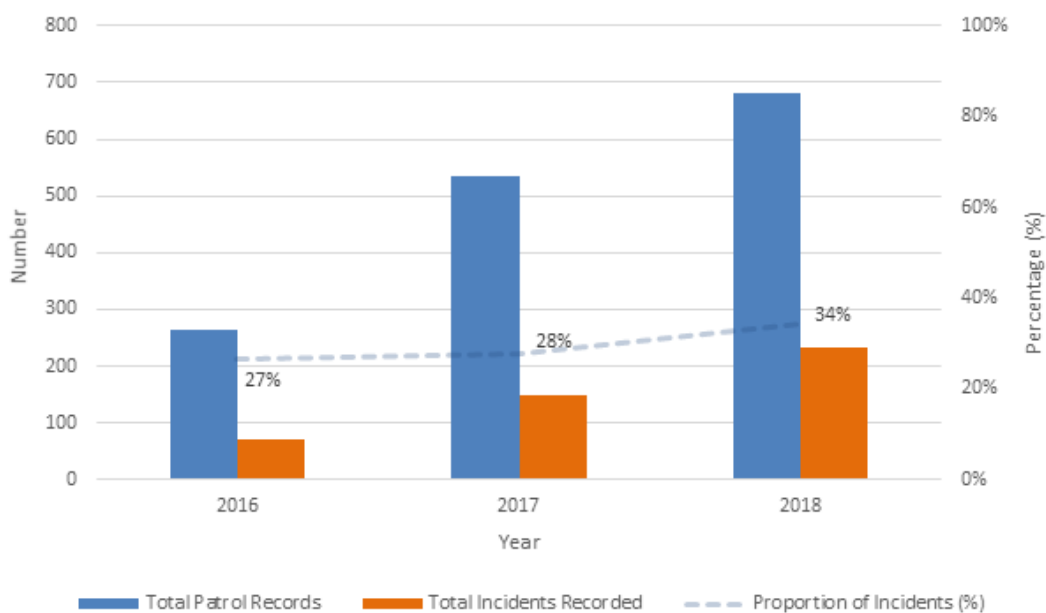
In the 2016 year, there were 264 records and 70 incidents. The proportion of patrol records reporting an incident was 27%.

In 2017, there were 535 patrol records and 147 incidents observed. The proportion of patrol records reporting an incident was 28%, a proportional increase of 1%.

In 2018, there were 680 patrol records with 233 incidents observed. The proportion of patrol records reporting an incident was 34%, a proportional decrease of 6% on the previous year.

The high proportion and number of incidents in 2018 is likely due to a change in the patrol schedule, which sought to target times and days where incidents were more likely to occur.

Figure 2: Total Patrol Records and Total Incidents Observed and Proportion of Incidents for all Sites



Site Information

This section outlines the number of incidents, and the percentage of patrol records with an incident for all sites.

Each figure is presented with two types of data, the number of incidents, which correlates to the left hand axis, and the percentage of patrol records with an incident, which correlates to the right hand axis.

Kairaki

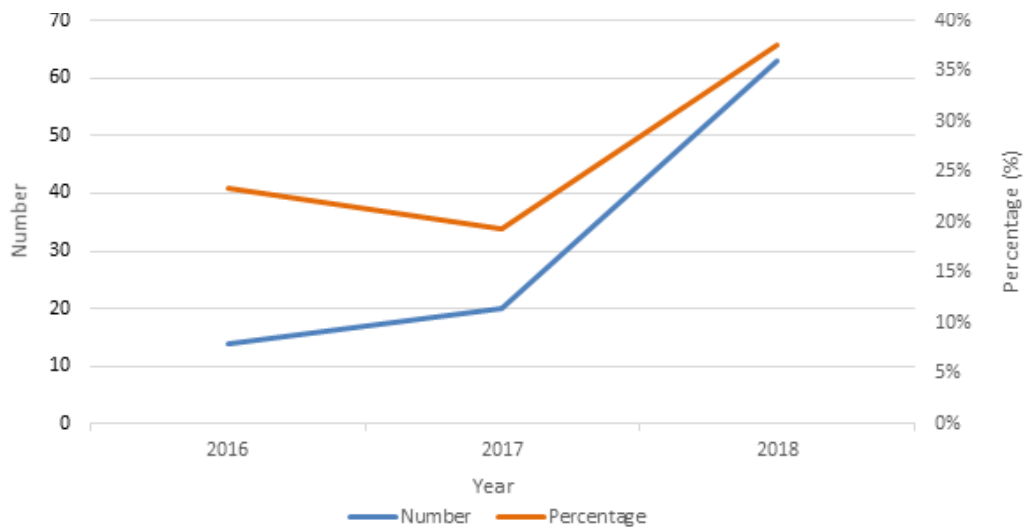
Figure three displays the number of incidents and the percentage of patrol records where an incident occurred at Kairaki Beach.

Between 2016 and 2017, the number of incidents at Kairaki increased from 14 to 20.

Between 2017 and 2018, the number of incidents increased substantially from 24 to 63.

Overall, the percentage of patrol records where an incident occurs has increased from 23% in 2016, to 38% in 2018.

Figure 3: Number of Incidents and Percentage of Patrol Entries with an Incident at Kairaki



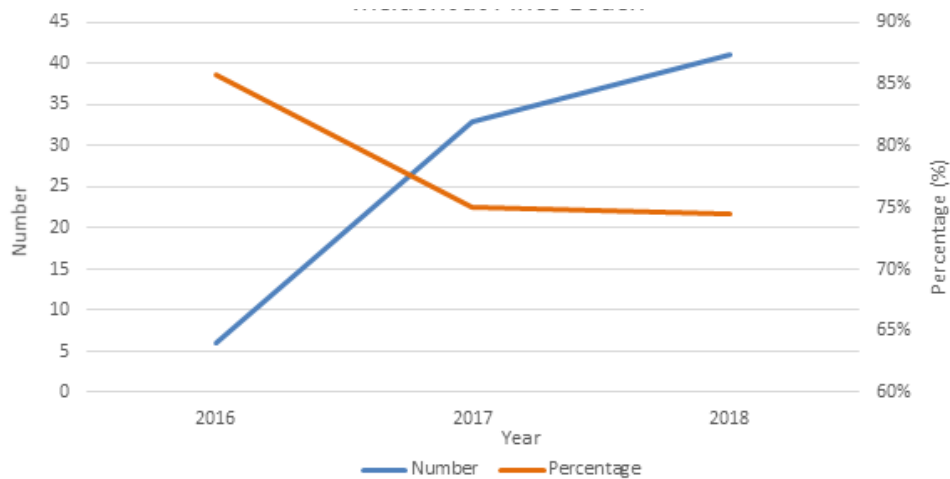
Pines Beach

Figure four displays the number of incidents and the percentage of patrol records where an incident occurred at Pines Beach.

In 2016, there were six incidents, and this increased to 33 in 2017. In 2018, the number increased to 41.

The percentage of patrol records with an incident in 2016 was 86% (it is worth noting that there was a small sample size for this year). This reduced in to 75% in 2017 and has remained relatively constant since (75% in 2018).

Figure 4: Number of Incidents and Percentage of Patrols with an Incident at Pines Beach



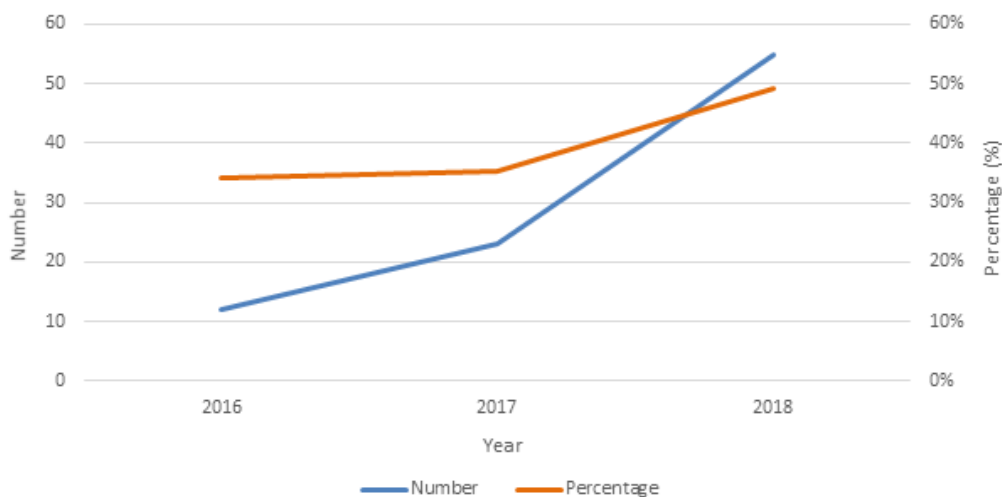
Ocean Outfall

Figure five displays the number of incidents and the percentage of patrol records where an incident occurred at the Ocean Outfall.

In 2016, there were 12 incidents, this increased to 23 in 2017, and to 55 in 2018.

Overall, the percentage of patrol records where an incident occurs has increased from 34% in 2016, to 35% in 2017. In 2018, it increased a further 14% to 49%.

Figure 5: Number of Incidents and Percentage of Patrols with an Incident at the Ocean Outfall



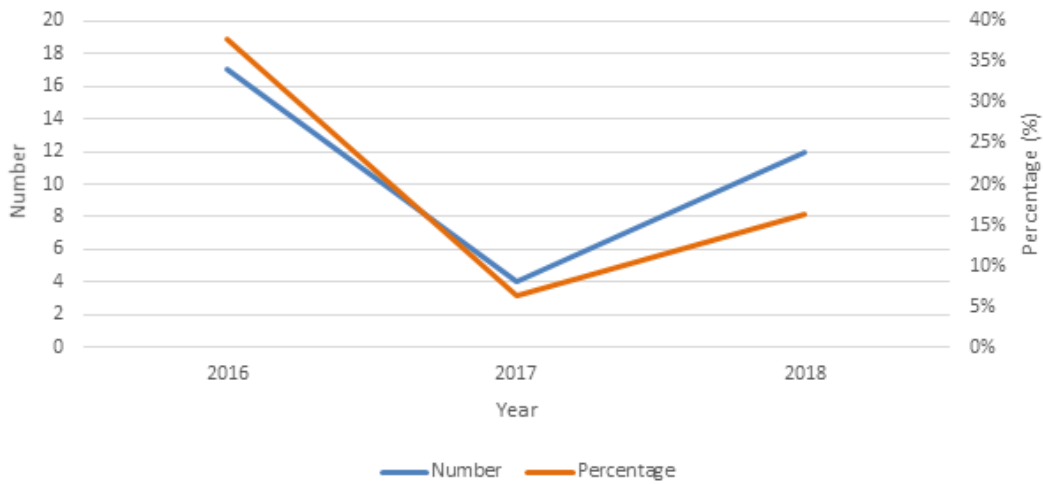
Woodend Beach

Figure six displays the number of incidents and the percentage of patrol records where an incident occurred at Woodend Beach.

In 2016, there were 17 incidents and this decreased to four in 2017. In 2018, it increased to 12.

Overall, the percentage of patrol records with an incident has decreased from 38% in 2016, to 16% in 2018.

Figure 6: Number of Incidents and Percentage of Patrols with an Incident at Woodend Beach



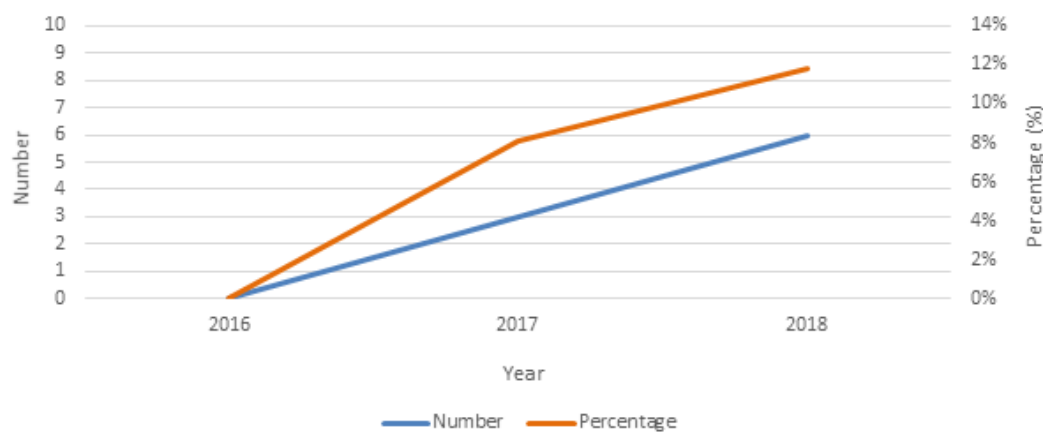
Pegasus Beach

Figure seven displays the number of incidents and the percentage of patrol records where an incident occurred at Woodend Beach.

In 2016, there were no recorded incidents. In 2017 there were three, and this increased to six in 2018.

Overall, the percentage of incidents in Pegasus has increased from 8% in 2017, to 12% in 2018, although it should be noted that the overall number is very low.

Figure 7: Number of Incidents and Percentage of Patrols with an Incident at Pegasus Beach



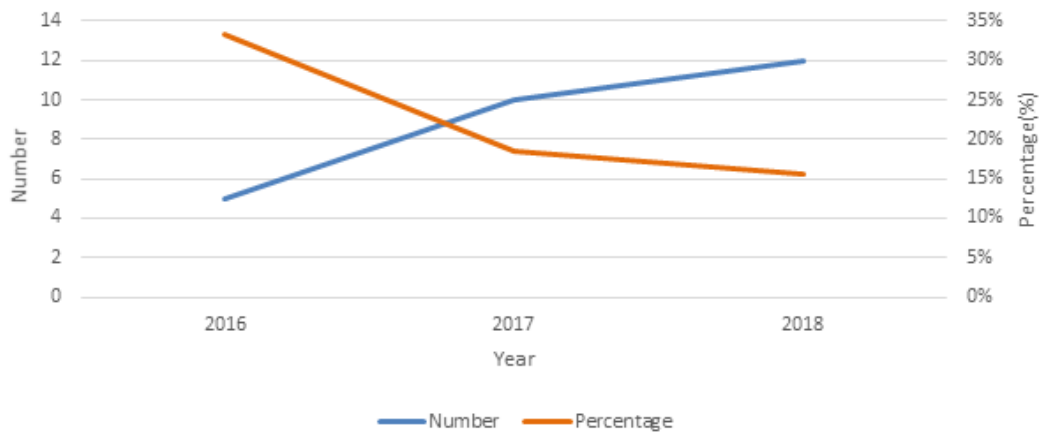
Waikuku Beach

Figure eight displays the number of incidents and percentage of patrol records where an incident occurred at Waikuku Beach.

In 2016, there were five incidents and this increased to 10 in 2017. In 2018, it increased to 12.

Overall, the percentage of incidents has decreased from 33% in 2016, to 16% in 2018.

Figure 8: Number of Incidents and Percentage of Patrols with an Incident at Waikuku Beach



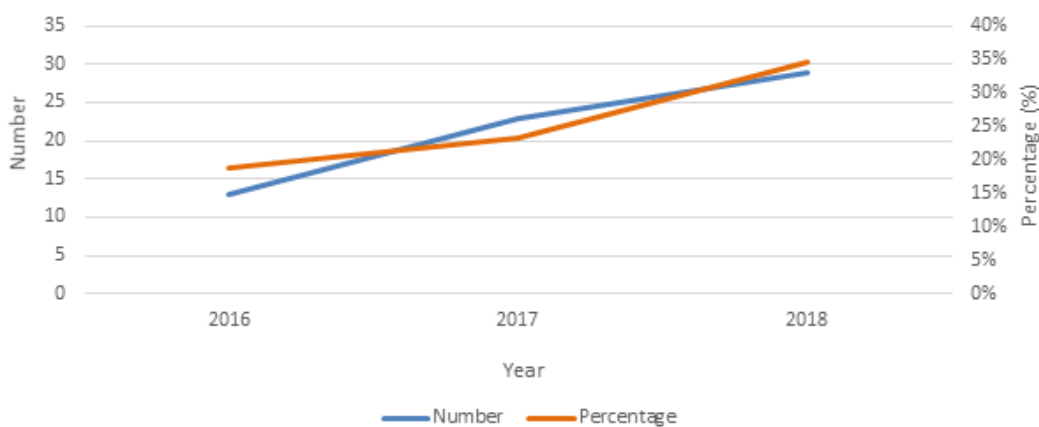
Ashley-Rakahuri Estuary

Figure nine displays the number of incidents and the percentage of patrol records where an incident occurred at Waikuku Beach.

In 2016, there were 13 incidents. This increased to 23 in 2017 and to 29 in 2018.

Overall, the percentage of patrol records with an incident has increased from 19% in 2016, to 36% in 2018

Figure 9: Number of Incidents and Percentage of Patrols with an Incident at the Ashley-Rakahuri Estuary



Other Areas

The following areas are either outside of Council jurisdiction or the locations were not specified.

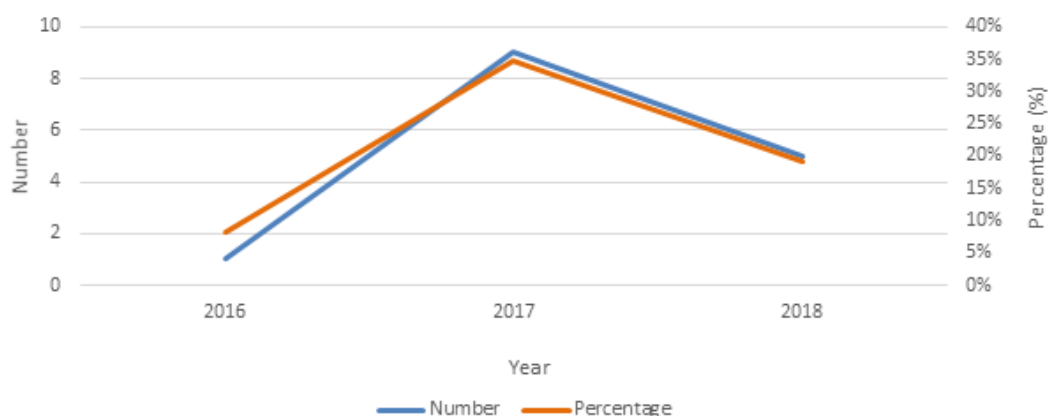
North of the Estuary

North of the Estuary is an amalgamation of Ashworths Beach, Leithfield Beach and the Kowhai Estuary. The majority of records were for Ashworths Beach as there were fewer records collected for Leithfield and Kowhai Estuary. These areas are outside of the Bylaw, and therefore are not governed by the same Bylaw rules. Figure ten displays the frequency of incidents and the percentage of patrol records where an incident occurred at sites North of the Ashley-Rakahuri Estuary.

In 2016, there was one incident, this increased to nine in 2017 and then fell to five in 2018.

Overall, the percentage of patrol records with an incident increased from 8% in 2016 to 35% in 2017. This decreased to 19% in 2018.

Figure 10: Number of Incidents and Percentage of Patrols with an Incident at sites North of the Ashley-Rakahuri Estuary



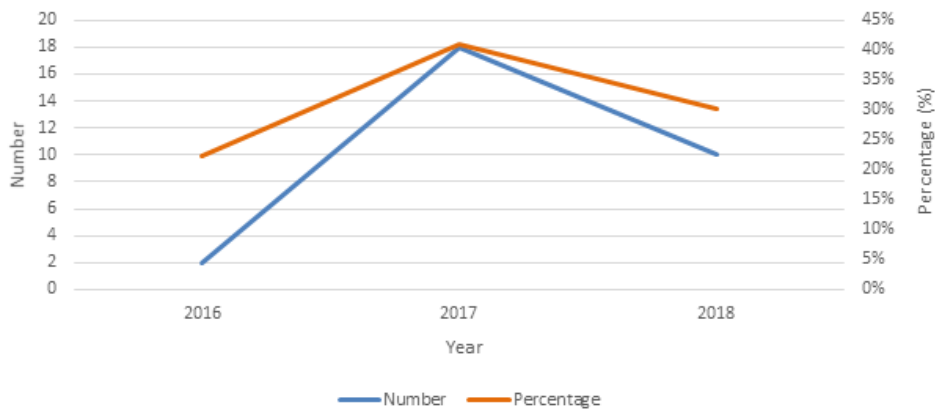
Unspecified Locations

Unspecified locations refer to sites where no location was entered into the database. Figure 11 displays the number of incidents and percentage of patrol records where an incident occurred at unspecified locations.

In 2016, there were two patrol records with incidents and this increased to 18 in 2017. In 2018, it decreased to 10.

Overall, the percentage of patrol records with an incident has increased from 22% in 2016, to 30% in 2018.

Figure 11: Number of Incidents and Percentage of Patrols with an Incident at Unspecified locations



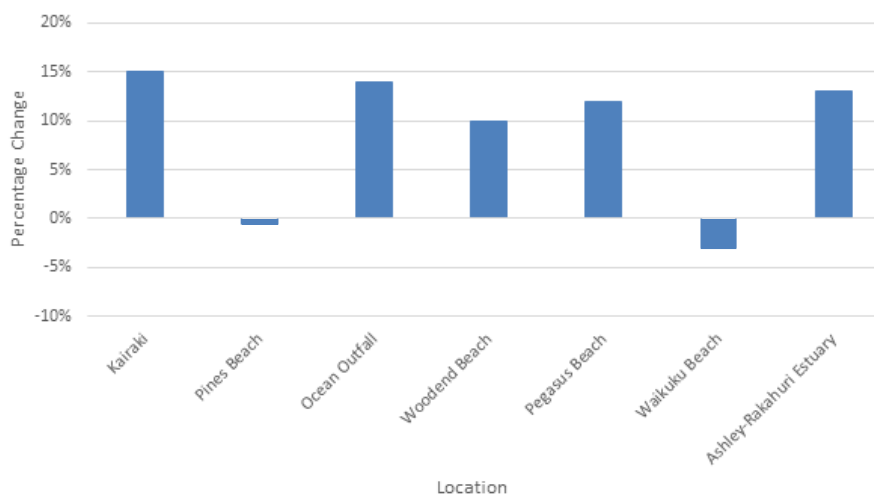
Change in Baseline Across all Sites

Figure 12 displays the percentage change in baseline incidents across all sites in Northern Pegasus Bay. In this context, 2017 has been selected as the baseline year as the 2016 patrol commenced in mid-August and does not cover a full year.

Since 2017, nearly all sites have experienced an increase in the percentage of incidents reported in patrol records.

This has included increases at Kairaki (15%), the Ocean Outfall (13%), the Ashley-Rakahuri Estuary (13%), Pegasus Beach (12%) and Woodend Beach (10%). However, the percentage of incidents reported in patrol records decreased in Waikuku Beach by 3%, and at Pines Beach by 1%.

Figure 12: Percentage Change in Incidents 2017 - 2018



Total Incidents

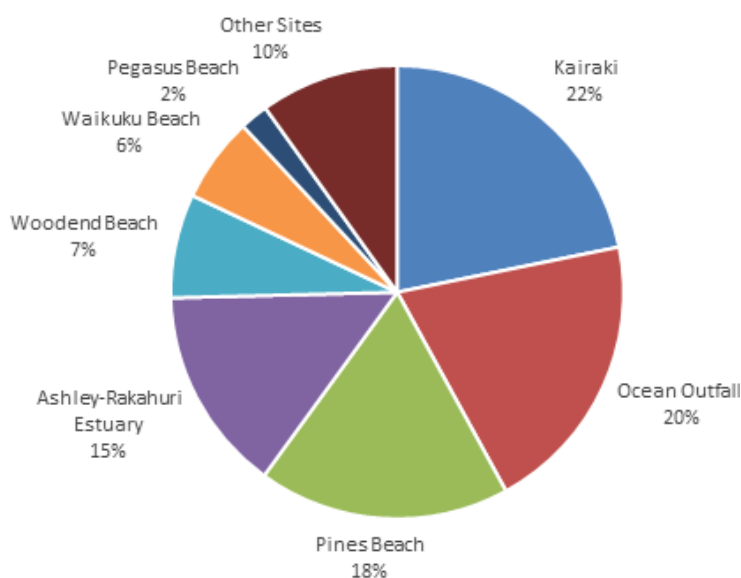
Figure 13 displays the total number of incidents that occurred in the coastal environment from 15th August 2016 to December 31st 2018.

The sites with the highest proportion of incidents are Kairaki (22%), the Ocean Outfall (20%), Pines Beach (18%), and the Ashley-Rakahuri Estuary (15%).

Sites with fewer incidents included Woodend Beach (7%), Waikuku Beach (6%), and Pegasus Beach (2%).

The 'Other sites' category was an amalgamation of unspecified locations and sites north of the Ashley-Rakahuri Estuary (e.g., Ashworths Beach & Kowai Estuary) and accounted for 10%.

Figure 13: Total Incidents Across All Sites (n=445)



Specific Incidents

The following tables show the number of specific breaches across all sites by type of breach.

Vehicles in prohibited areas account for the highest number of Bylaw breaches collected by the ECRS.

Vehicles

Figure 14 displays the proportion of patrol records where a vehicle was found in a prohibited area.

In 2016, 16.7% of patrol records consisted of vehicles in the wrong area. This decreased to 15.9% in 2017 and then increased to 19.1% in 2018.

The data suggests that from 2016 to 2018, the number of vehicles found in prohibited areas has proportionately increased by 2.1%. This could be due to a number of factors, including a change in patrol methods.

Figure 14: Vehicles in Prohibited Areas by Year

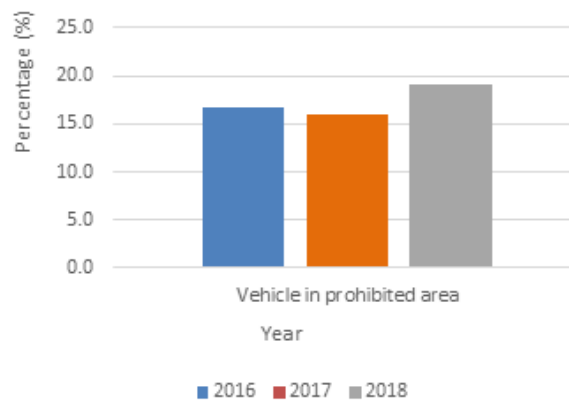


Table Three: Vehicles in Prohibited Areas by Location

Table three displays the number and proportion of vehicles in prohibited areas by location.

In 2016, vehicles in prohibited areas were mostly likely to be found in Kairaki, the Ocean Outfall and Woodend Beach.

In 2017, they were most likely to be found at Pines Beach, the Ocean Outfall and the Ashley-Rakahuri Estuary.

In 2018, they were most likely to be found at the Ocean Outfall, Kairaki and Pines Beach.

Location	2016		2017		2018	
	n	%	n	%	n	%
Kairaki	11	25%	7	8.2%	35	26.9%
Pines Beach	4	9.1%	28	32.9%	25	19.2%
Ocean Outfall	9	20.5%	17	20%	37	28.5%
Woodend Beach	9	20.5%	3	3.5%	7	5.4%
Pegasus Beach	0	0%	2	2.4%	4	3.1%
Waikuku Beach	3	6.8%	4	4.7%	5	3.8%
Ashley-Rakahuri Estuary	7	15.9%	9	10.6%	9	6.9%
North of Estuary	0	0%	1	1.2%	2	1.5%
Unspecified location	1	2.3%	14	16.5%	6	4.6%
Total	44	100%	85	100%	130	100%

Figure 15: Sites with the Highest Proportion of Vehicles in Prohibited Areas 2016 – 2018

Figure 15 displays the sites with the highest proportion of vehicles in prohibited areas from 2016 to 2018.

Overall, the Ocean Outfall (24%), Pines Beach (22%), and Kairaki (21%) had the highest proportions. This was followed by the Ashley-Rakahuri Estuary (10%), Woodend Beach (7%), Waikuku Beach (5%) and Pegasus Beach (2%).

The Other category was an amalgamation of “unspecified location” and sites north of the Ashley-Rakahuri Estuary (North of Estuary), which accounted for 9%.

Figure 15: Sites with Proportion of Vehicles in Prohibited Areas Years 2016 - 2018 (n=259)

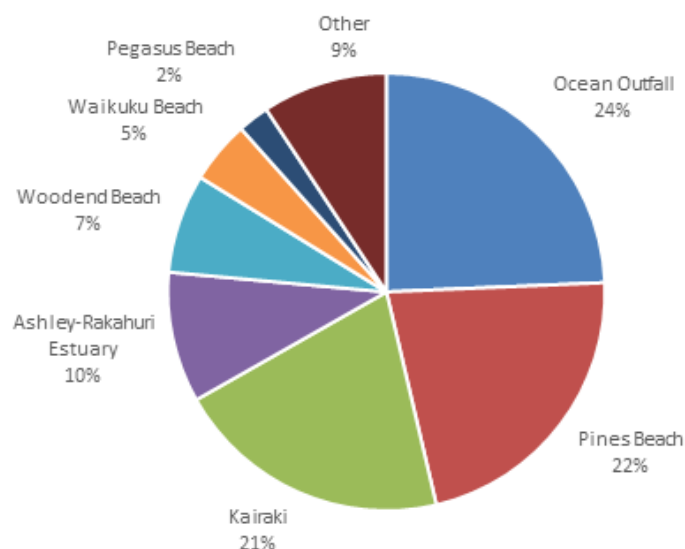


Table Four: Types of Vehicle Incidents

Table four displays the specific types of vehicle breaches collected by the ECRS from 2016 to 2018.

Overall, the number and proportion of patrol records where vehicles have been found in the sand dunes has increased by 2.2% since 2016.

Driver behaviour (e.g. aggressive or anti-social behaviour of vehicle users) decreased proportionately in 2017 but increased again in 2018. Overall, driver behaviour incidents have increased by 0.4% since 2016.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Vehicle stationed in/damaging dunes	1	0.4	8	1.5	18	2.6
Driver behaviour	4	1.5	6	1.1	13	1.9
Vehicle other	0	0	3	0.6	0	0

Table Five: Types of Motorbike Incidents

Table five displays the specific types of motorbike breaches collected by the ECRS from 2016 to 2018.

Overall, the number and proportion of motorbikes found in prohibited areas has increased by 1.3% since 2016. In the same period, the number of motorbikes stationed in sand dunes has fallen by 0.5%.

Incidents of anti-social behaviour from motorbike drivers have increased by 0.4% in 2018, although there were not any previous records of this incident in the years preceding.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Motorbike in prohibited area	8	3.0	18	3.4	27	4.0
Motorbikes stationed in sand dunes	2	0.8	0	0	2	0.3
Motorbike driver anti-social behaviour	0	0	0	0	3	0.4

Table Six: Types of Dog Incidents

Table six displays the specific types of dog breaches collected by the ECRS from 2016 to 2018.

Overall, the incidence of dogs in prohibited areas has fallen by 0.4% since 2016. However, in the same period the number of uncontrolled dogs has increased by 0.2% although there were no recorded incidents in 2017. Overall, the number of recorded incidents is low.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Dogs in prohibited areas	3	1.1	4	0.7	5	0.7
Uncontrolled dogs	1	0.4	0	0	4	0.6

Table Seven: Litter incidents

Table seven displays the incidence of litter being discovered by the ECRS from 2016 to 2018. Since 2016, discoveries of litter have increased by 1.7%.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Litter discovered	1	0.4	8	1.5	14	2.1

Table Eight: Fire Incidents

Table eight displays the incidence of a fire being discovered by the ECRS from 2016 to 2018. Overall, this increased by 0.9% between 2016 and 2017 but has remained constant since then.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Fire discovered	1	0.4	7	1.3	9	1.3

Table Nine: Vandalism Incidents

Table nine displays the incidence of vandalism recorded by the ECRS between 2016 and 2018. Overall, damage or removal of signage has increased by 0.4% since 2016.

Damage to fencing has increased by 1.5%, despite having no recorded incidents in 2016.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Damage/removal of signage	3	1.1	3	0.6	10	1.5
Damage to fencing	0	0	3	0.6	10	1.5

Table Ten: Other Incidents

Other incidents included horses, freedom camping, whitebaiting, boating, drone flying, watercraft, anti-social behaviour and non-bylaw related incidents. No specific trends can be observed from this data.

Breach Type	2016		2017		2018	
	n	%	n	%	n	%
Horses	2	0.8	1	0.2		
Freedom Camping	1	0.4				
Whitebaiting	1	0.4				
Boat					1	0.1
Drone Flying					1	0.1
Watercraft					1	0.1
Anti-social behaviour					1	0.1
Non-Bylaw related			2	0.4	1	0.1

Recommendations

The information in this report should be used to inform decision making or to increase public awareness of the NPBB 2016. This can be achieved through signage or infrastructure enhancements, or targeted public awareness campaigns.

There are a range of additional recommendations that can be made from the results of this report. These mostly refer to monitoring programmes, improving data entry and establishing baselines for Bylaw breaches.

These are as follows:

Annual Reporting of ECRS Records

There should be annual reporting of the ECRS patrol records. Repeating the report on the ECRS records will allow ongoing monitoring of the incidents identified by the ECRS. This helps to identify potential Bylaw breaches, where incidents occur, and how effective the patrols or patrol methods are.

Improve Data Entry

If this report is repeated, improving data entry should be a priority. This should focus on improving site information data (e.g. the locations where incidents are occurring) to reduce the number of records that do not specify locations.

This can be done through geographic information system (GIS) software. For instance, every patrol record that is entered into the smart phone application by the ECRS records GPS data. This information can be sent to Council and sites can be mapped or defined based on their latitudinal or longitudinal information. This would help to reduce the number of unspecified locations from the report.

A second way in which data entry can be improved is through ensuring that only one patrol record is entered for one Bylaw breach. This would reduce the potential for incidents to become overrepresented.

Establish Baselines

The information in this report should be used as baselines for incidents at each site (e.g. Kairaki, Pines Beach etc.) and for the type of incidents identified. This includes:

- The total proportion of incidents across all sites.
- Vehicle incidents such as vehicles in prohibited areas, vehicles stationed in/damaging dunes, driver behaviour or any other vehicle incidents.
- Motorbike incidents such as motorbikes in prohibited areas, stationed in/damaging dunes, or anti-social behaviour.
- Dog incidents, such as dogs in prohibited areas, or dogs that are uncontrolled.
- Litter incidents
- Fire incidents
- Vandalism incidents such as damage/removal of signage or damage to fencing, and
- All other incidents identified in table ten of this report.

Patrols

A final recommendation is that the ECRS continues to target patrols towards Kairaki, Pines Beach, and the Ocean Outfall as these sites have a high proportion of vehicles in prohibited areas. It is also recommended that patrols target the Ashley-Rakahuri Estuary due to its high ecological values and importance to people who submitted to the last Bylaw review.





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