



Coast Care Beach User Survey - Final Report

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Bay of Plenty Regional Council
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Executive Summary

The 2023 Bay of Plenty Beach User Survey was conducted online during August and early September 2023. The survey received 618 individual responses to a series of 22 questions. Responses were analysed and compared to previous surveys completed between 2009 and 2014.

The survey results confirmed many of the themes and trends identified in previous surveys, including:

- Beach users value Bay of Plenty beaches as safe recreational places for children and families, as well as for their natural beauty and wildlife.
- Beach users do not support coastal protection methods that result in the loss of sandy beach area, even if this would protect coastal property.
- Beach users support the restriction of vehicle access to beaches and the enforcement of these rules by councils.
- Beach users understand the role that beaches and dune systems play in mitigating coastal storm damage, but are also aware of their susceptibility to storm, pest, and human-induced damage.
- Dune planting is the most acceptable method of restoring and protecting beaches, dunes, and coastal property.
- Beach users strongly support collaboration between councils and the community to protect and manage beaches and dunes.
- Beach users overwhelmingly support ratepayer funding for the Coast Care dune restoration program.

The survey results provide valuable insights into the community's values and priorities regarding coastal management. They can be used to develop and implement policies and programs that reflect the community's views and ensure the sustainable protection of Bay of Plenty beaches and dunes.



Introduction

Coast Care Bay of Plenty (BOP) is a multi-agency partnership between communities and Local Government that was established in 1994 to protect, enhance, and restore the region's 156 km of sandy coastal dune systems. The dune system is nationally threatened and provides a home for numerous native species, amenity to beach users, and first-line protection from coastal processes and hazards that threaten coastal property and infrastructure.

The Coast Care BOP programme is funded by partner agencies, Bay of Plenty Regional Council (BOPRC), Tauranga City Council (TCC), Western Bay of Plenty District Council (WBOPDC), Whakatane District Council (WDC), Opotiki District Council (ODC), and the Department of Conservation (DoC), with further in-kind support from local businesses. In 2022, the programme planted over 57,000 plants with the help of over 3000 volunteers.

The 2023 Coast Care BOP Beach User Survey was conducted to contribute to a review of the programme to ensure that it remains fit for purpose for the future.

Methodology

The 2023 Coast Care Beach User Survey was an online-only survey promoted via media outlets, partner social media platforms, email, and signage placed strategically at high-use beach accesses. This approach generated 618 full or partial responses.

The survey questionnaire (see Appendix 1) was developed, based on current issues raised by the Coast Care community and included significant overlap with prior surveys to facilitate trend analysis. Likert scales with five ordered response levels were used for several questions to assess respondents' levels of importance, unimportance, agreement, or disagreement with statements.

Prior surveys were conducted in December 2009-January 2010, December 2011-January 2012, and December 2013-January 2014. The 2009-2010 survey received 519 responses, the 2011-2012 survey received 355 responses, and the 2013-2014 survey received 373 responses.

These surveys are an important tool to measure the progress of Coast Care BOP within the community in terms of public awareness of the programme, willingness to participate, and preferences for coastal protection management. They also provide insights into the community's understanding of natural coastal processes and sand dunes, and their perceived importance of coastal values.

Results

Report findings for the 2023 survey are divided into the following categories:

- Demographics of respondents.
- Community coastal values.
- Public knowledge of coastal processes, climate change and sand dunes.
- Coastal protection management.
- Public knowledge, and participation in the Coast Care BOP programme.

Demographics

Who responded to the survey?

The 2023 survey attracted 618 full or partial responses representing a 19% increase on the previous best of 519 (2009-10). Respondents were predominantly female (70%) equally distributed amongst families with children (33%), retirees (30%) and singles/couples without children (28%).

Forty five percent of respondents indicated that they visited the beach at least once per week in the last year, with a further 18% indicating a beach visit once or more per week but mainly over Summer.

Though previous surveys collected detailed intra-regional location data, this was forgone in this iteration in order to include several new questions. Respondents were, however, asked what town or suburb they lived in. The responses to this question can be found in the mind map below where a larger font size designates a higher frequency of mention.



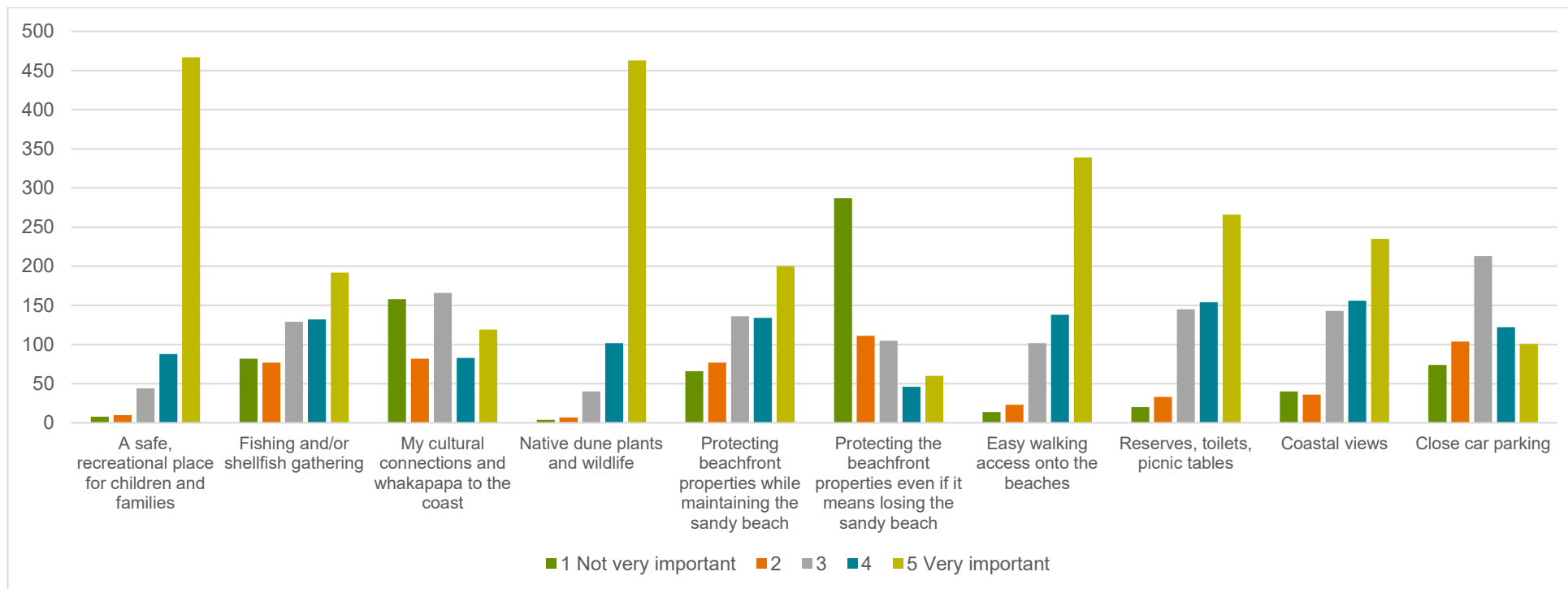
Community Coastal Values

What does the community value about the coastal environment?



As in previous surveys, the community continues to place value on BOP beaches being a safe recreational place for children and families, with 90% of respondents considering this value to be either important or very important, however, in the 2023 survey, this value was surpassed for the first time by 'native dune plants and wildlife' with a net 92% of respondents considering it important/very important. This shift continues trends observed in earlier surveys. Rounding out the top three values was 'Easy walking access on the beach', a value perennially considered by respondents to be important to them.

Of note in the 2023 survey was the, again, relatively low importance respondents place on the protection of beachfront properties, particularly if this would mean the loss of sandy beach. If properties could be protected while maintaining the sandy beach, a net 54% of respondents were supportive while suggesting that the sandy beach might be sacrificed to protect properties, saw support fall away to a net 17% (agree or strongly agree).



	1 Not very important				5 Very important
A safe, recreational place for children and families	8	10	44	88	467
Fishing and/or shellfish gathering	82	77	129	132	192
My cultural connections and whakapapa to the coast	158	82	166	83	119
Native dune plants and wildlife	4	7	40	102	463
Protecting beachfront properties while maintaining the sandy beach	66	77	136	134	200
Protecting the beachfront properties even if it means losing the sandy beach	287	111	105	46	60
Easy walking access onto the beaches	14	23	102	138	339
Reserves, toilets, picnic tables	20	33	145	154	266
Coastal views	40	36	143	156	235
Close car parking	74	104	213	122	101

A visual mind map (with more frequently mentioned comments represented by larger fonts) of the additional comments provided by survey respondents to this section, indicates that consistent with a desire by the community for beaches to be safe places for families, a significant subset of respondents would like vehicle access onto our beaches limited.

This position is further supported by the response to Question 5 of the 2023 survey, which directly asked if respondents support their local authorities restricting the use and access of vehicles on beaches. An unequivocal net 86% (agree or strongly agree) say that they do which is broadly consistent with earlier surveys, which more simply asked if the restriction of vehicles on Bay of Plenty beaches (net 80% approximately) was an appropriate coastal protection method.



Public knowledge of coastal processes, climate change and sand dunes

What does the public know about coastal processes (erosion), flora and fauna (habitat) and climate change?

Questions 3 and 4 of the Coast Care survey assess community knowledge of coastal processes, habitat, and climate change. These questions are important in their own right and also provide insight into the success of the educational elements of the program.

Consistent with earlier surveys, most respondents (2023) agreed or strongly agreed that erosion is a natural coastal process. However, they were less sure that coastal erosion can be reversed.

Also consistent with earlier surveys, a net 67% of respondents believed that rabbits contribute to coastal erosion. The proportion of respondents believing that weeds in dunes also contribute to coastal erosion, increased significantly from approximately 27% in earlier surveys to 42% in 2023. This is a pleasing result, as this message is part of each event's educational section.

A change to the wording of the 2023 question regarding the contribution of people and their animals, to coastal erosion, makes it difficult to compare the results to earlier surveys. However, the 2023 results indicate that the majority of respondents (76%) understand that people and animals walking in the dunes damage the dune systems. This question was further supported by Question 6, which directly asked respondents if they support their local authorities taking action against unleashed dogs on the beach. Interestingly, though the majority (net 57%) support action being taken, this is considerably less important to respondents than the restriction of vehicles on beaches (net 86%). This may reflect the fact that a higher proportion of respondents are also dog owners who use the beach to walk their pets.

The following is a mind map of comments associated with Questions 5 and 6.

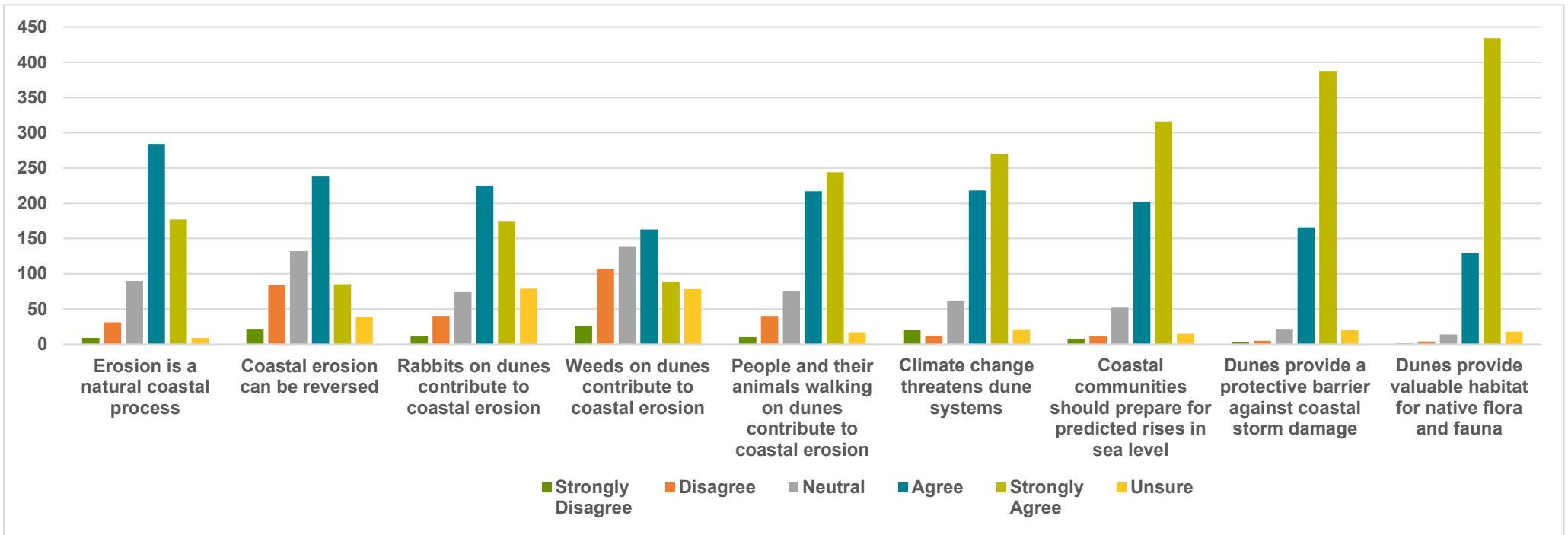


The survey also found that the vast majority of respondents (net 81%) understand the risk climate change poses to dune systems, and a net 85% believe that coastal communities should be preparing for predicted sea level rises. Additionally, a net 92% (up from 87% in prior surveys) now know that coastal dunes provide a protective barrier against coastal storm damage.

Consistent with the value respondents placed on native dune plants and wildlife in Question 1, a net 94% agreed or strongly agreed that dunes provide valuable habitat for these native taonga. The proportion of respondents who agree or strongly agree with this statement has been trending upward since the inception of the surveys.



Results indicate that the community has a high level of awareness of the risks posed by climate change to dune systems and coastal communities. The community also values the important habitat that dunes provide for native taonga. These results are encouraging and suggest that the Coast Care program is effectively educating the community about the importance of coastal dunes.



	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Unsure
Erosion is a natural coastal process	9	31	90	284	177	9
Coastal erosion can be reversed	22	84	132	239	85	39
Rabbits on dunes contribute to coastal erosion	11	40	74	225	174	79
Weeds on dunes contribute to coastal erosion	26	107	139	163	89	78
People and their animals walking on dunes contribute to coastal erosion	10	40	75	217	244	17
Climate change threatens dune systems	20	12	61	218	270	21
Coastal communities should prepare for predicted rises in sea level	8	11	52	202	316	15
Dunes provide a protective barrier against coastal storm damage	3	5	22	166	388	20
Dunes provide valuable habitat for native flora and fauna	1	4	14	129	434	18

Additional comments provided by respondents can be found aggregated in the mind map below.

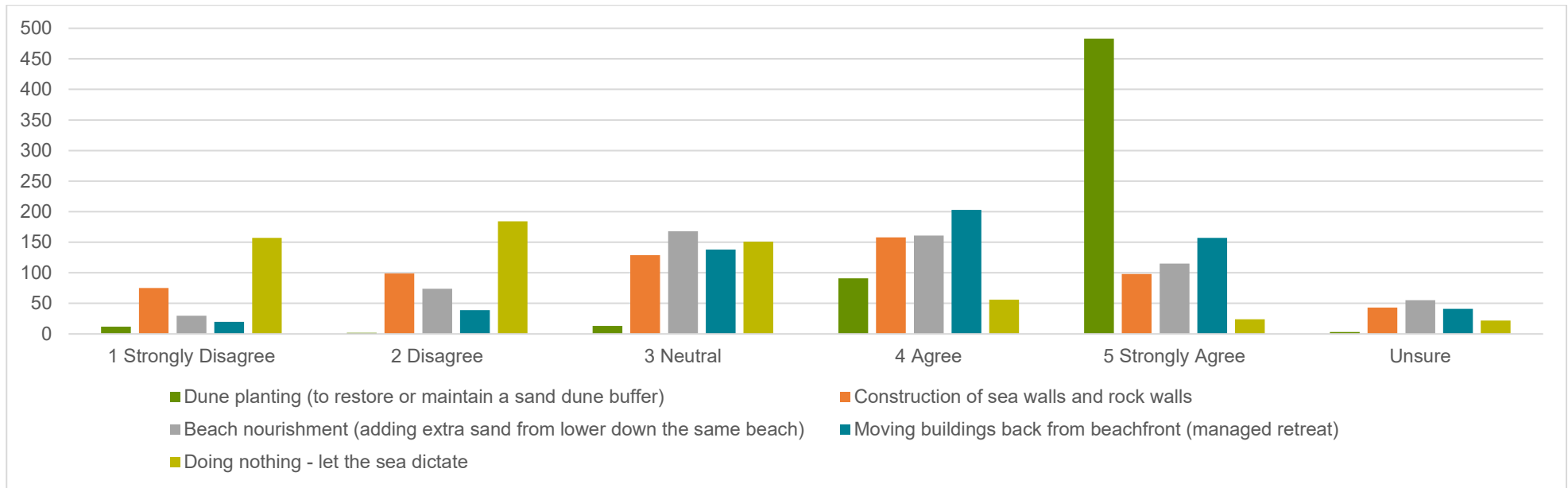


Coastal protection management

How do people prefer to see coastal protection implemented?

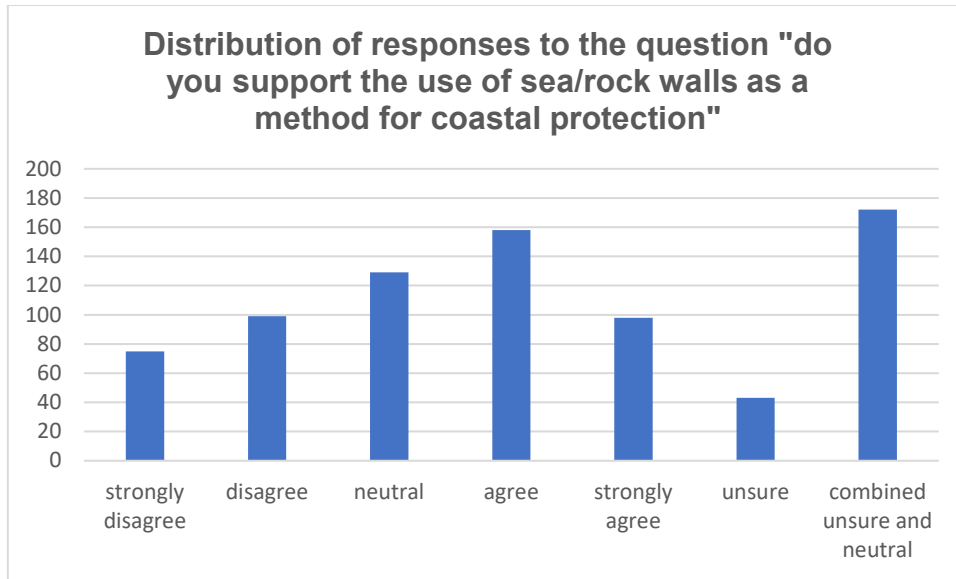
In this section, the community was asked what they thought about the restoration/coastal protection methods in use by local authorities and Coast Care. Unsurprisingly, most people agree (net 95% agree or strongly agree) that dune planting is the preferred method, a consistent theme also found in previous survey results.





	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree	Unsure
Dune planting (to restore or maintain a sand dune buffer)	12	2	13	91	483	3
Construction of sea walls and rock walls	75	99	129	158	98	43
Beach nourishment (adding extra sand from lower down the same beach)	30	74	168	161	115	55
Moving buildings back from beachfront (managed retreat)	20	39	138	203	157	41
Doing nothing - let the sea dictate	157	184	151	56	24	22

Always a fraught subject, it's difficult to assess the community's position on the construction of sea/rock walls as a protection method as shown in the distribution of responses below, which suggests that more people are either neutral or unsure of its suitability than any other response.



Interestingly, the acceptance by respondents of beach nourishment (the movement of sand from further down the beach into the fore-dune area) as a method, despite an increase in its use in recent years, remains only moderately supported by the community at a net 46% - a finding consistent with earlier surveys.

Managed retreat saw an increase in acceptance to 60% net in the 2023 survey relative to the average of the three prior surveys at 52% but its difficult to say whether this represents a trend or not, as the 2011-12 survey yielded a net 57% acceptance of this method.



What is clear from both the earlier surveys and the 2023 iteration is that few people believe that we should do nothing and let the sea dictate the future of our dune systems. In 2023, only 13% prefer this approach which is broadly consistent with earlier surveys.

A mind map of additional respondent comments made regarding this set of questions can be found below.



Public knowledge, participation, and support for the Coast Care BOP programme

What is the community's knowledge of, and participation in Coast Care BOP and what support is there for ongoing funding of the programme?

The 2023 survey suggests that the awareness of the Coast Care BOP programme has approximately doubled in the period between the 2023 survey and the 2013-2014 (and earlier) surveys with 75% of respondents now indicating that they had heard of Coast Care before completing the survey. Some caution should, however, be taken when considering this result as the methods for data collection between the 2023 survey and earlier surveys is markedly different (i.e. the 2023 survey was promoted directly to the existing Coast Care volunteer community via email and social media, which may be skewing this result).

When asked how the community would like the programme to be administered, the status quo 'Led by Councils and supported by communities' was clearly preferred at 57% of all responses. 'Led by communities and supported by councils' ranked second at 31% of responses. In aggregate, it is clear that the vast majority of respondents prefer for the programme to be a collaborative effort between the community and councils.

It's also clear that our community supports the ongoing funding of Coast Care with 83% saying yes to the question 'Do you support ongoing ratepayer funding of the Coast Care programme?'. When combined with the question 'have you volunteered with a Coast Care programme in the past 12 months' it also becomes clear that it's not just our volunteers that support ongoing funding, as 70% of respondents have not volunteered at a Coast Care event in the past 12 months.

When asked about the barriers preventing respondents from being involved with Coast Care, the main reasons given were 'events are not well publicised' (30%), 'Timing of events don't suit' (27%) and 'I don't have time' (22%).

A final wrap-up question to respondents asking for any additional feedback about Coast Care more generally yielded the mind map below.



Discussion

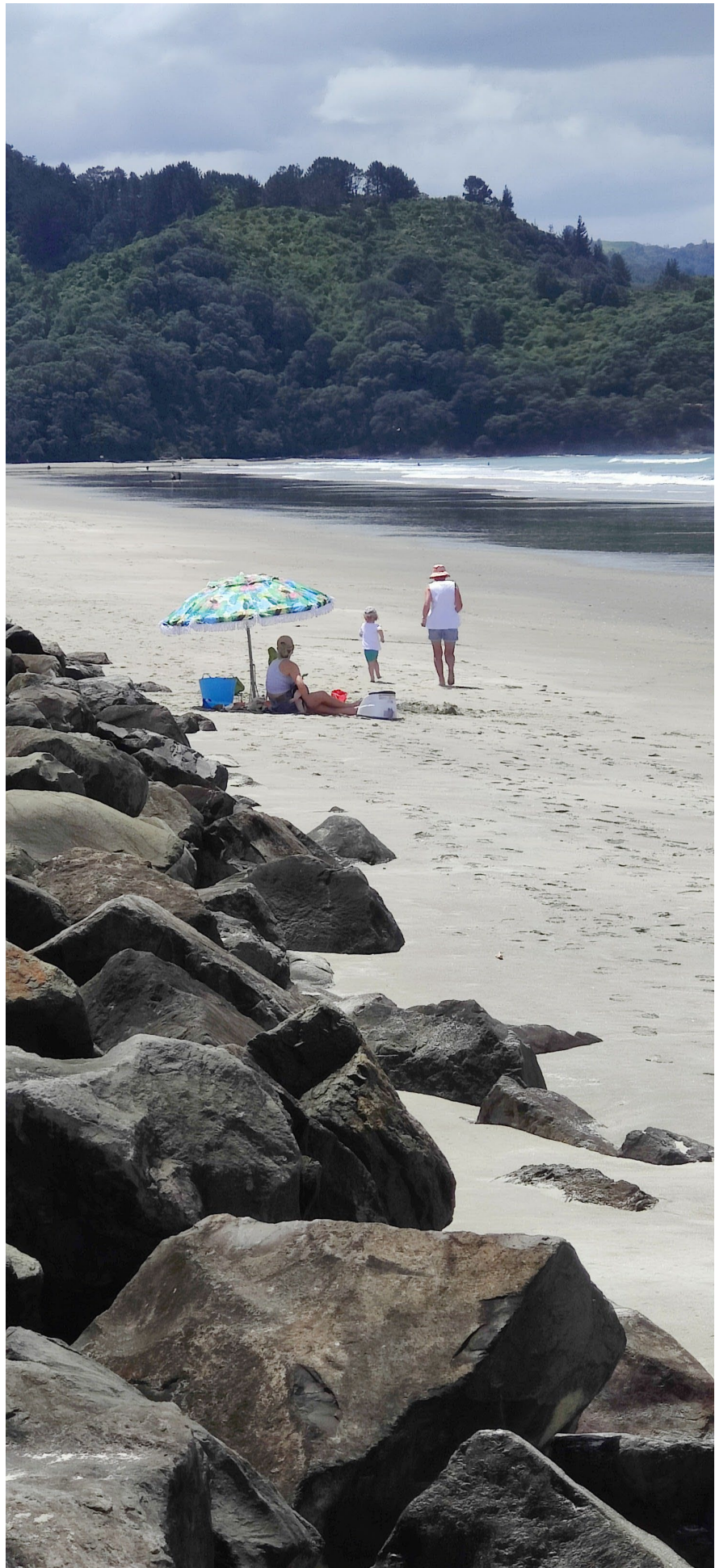
The 2023 Coast Care Beach User Survey provides valuable insights into the community's values, knowledge, and preferences regarding coastal management. The survey results are broadly consistent with previous surveys, suggesting that the community continues to place high value on the Bay of Plenty's beaches as safe recreational places for children and families, as well as for their natural beauty and wildlife.

The survey also found that the community is well aware of the risks posed by coastal erosion and climate change, and that they support a range of coastal protection measures, including dune planting, beach nourishment, and managed retreat. However, there is less support for the construction of seawalls and other hard engineering solutions.

Some additional thoughts and discussion points:

- The community's strong support for native dune plants and wildlife is a positive finding, as these ecosystems play a vital role in coastal protection.
- The community's acceptance of managed retreat as a coastal protection measure is also encouraging, as this approach is likely to become more necessary in the future if climate change continues on its current trajectory.
- The Coast Care BOP programme is clearly a valuable asset to the community, and it is important to find ways to address the barriers to participation, such as lack of publicity and timing.

The survey results provide a good foundation for developing and implementing coastal management policies and programmes that reflect the community's values and priorities.



Implications for Coast Care Bay of Plenty

The survey results provide a good foundation for developing and implementing coastal management policies and programmes that reflect the community's values and priorities. For example, the strong support for native dune plants and wildlife suggests that Coast Care BOP should continue to focus on dune restoration and planting. The community's support for a range of coastal protection measures also suggests that Coast Care BOP should continue to work with local authorities to implement a variety of coastal protection solutions, tailored to the specific needs of different beaches.



The survey results also highlight some areas where Coast Care BOP could improve its outreach and engagement with the community. For example, the lack of publicity and timing constraints were identified as barriers to participation in Coast Care events. Coast Care BOP could address these barriers by developing more targeted and effective publicity campaigns, and by offering a wider range of event times and dates.

In addition to the above, I would like to highlight the following findings from the survey:

- The community is strongly supportive of restricting vehicle access to beaches. This is a significant finding, as vehicle access can have a negative impact on coastal ecosystems and dune stability.
- The community is aware of the risks posed by climate change to coastal dune systems. This is important, as it suggests that the community is open to considering climate change adaptation measures, such as managed retreat.
- The community is supportive of ongoing funding for the Coast Care BOP programme. This is a positive finding, as it suggests that the community values the work that the programme does to protect and restore coastal dune systems.

Overall, the 2023 Coast Care Beach User Survey provides valuable insights that can be used to improve the effectiveness of coastal management in the Bay of Plenty.