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Te Ao Tūroa



# Engaging with the community on coastal issues

Hawke's Bay Coastal Survey 2017

A summary of the survey and results

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# Engaging with the community on coastal issues: Hawke's Bay coastal survey 2017

## A summary of the survey and results

**Authors:** Julia Becker<sup>1</sup>, Priya Patel<sup>1</sup>, Emma Ryan<sup>2</sup>, Paul Schneider<sup>3</sup>, Paula Blackett<sup>4</sup>

### Survey aim:

Community understanding of coastal hazards is a critical component in implementing successful adaptation to changing coastal hazard risks. Social factors, including community members' perceptions and diverse and contested interests, are integral to coastal planning for the future yet challenging to manage. Initial interviews with key stakeholders in Hawke's Bay that Edge conducted in 2016 revealed that coastal hazards pose a huge social issue for the wider region as solutions for those immediately affected will impact much more widely than the specific coastal areas. Several interviewees felt that the issue needed serious reframing from a problem that experts identify, to one of a wider community issue that could get buy-in from those which may have to pay over the long term.

This study conducted by the Living at the Edge (Edge) team aimed to investigate the wider views of the Hawke's Bay public on coastal hazard and management issues, and their input into the Clifton to Tangoio Coastal Hazards Strategy 2120 (the Strategy). This insight helps to understand how locals perceive their coast and the future and provides important wider community views to be considered when determining adaptation pathways. We undertook a quantitative survey of the public in Napier and Hastings. This survey was deemed complementary to the Strategy and other ongoing pieces of work, including the social impact assessment work undertaken by Maven Consulting. The social impact assessment was interview-based and focused on exploring social values and impacts of coastal hazards in the *priority coastal units*. In contrast, our work sought to complement the Maven Consulting work by capturing a *broader cross-section of community views*, beyond those communities most at risk to coastal hazards.

### Survey methodology:

A quantitative survey was used for canvassing the public in a general sense about their values of the coast, their views on coastal issues and management options, and their current level of involvement in local coastal decision-making. The survey consisted of 24 questions, consisting of new Strategy-relevant questions and questions adapted from previous coastal surveys. A copy of the survey is attached to this summary report. The survey was disseminated in two ways: 1) by handing out paper survey forms at key public locations during 27-29 May 2017, and 2) via the internet at SurveyMonkey. In total, 338 responses were received (218 people via face-to-face means, and 120 people via the SurveyMonkey website). Data were analysed using IBM SPSS statistics software and Microsoft Excel software. A Low Risk Ethics Notification was submitted to the Massey University ethics system and approved, with a resulting Ethics Notification Number of 4000017583.

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<sup>1</sup> GNS Science, New Zealand

<sup>2</sup> School of Environment, The University of Auckland, New Zealand

<sup>3</sup> School of People, Environment and Planning, Massey University, New Zealand

<sup>4</sup> NIWA, New Zealand

**Survey results:**

The below bullet points highlight some key results from the survey that will be relevant to the decision-making during the Strategy. A full report, included all figures and tabulated data, will be made available to the Technical Advisory Group and panels once it is completed.

**Demographics**

- Most respondents live further than 10 km inland (28%), or 5-10 km from the coast (25%), were NZ European (77%), and were aged between 45-54 years (27%), 55-64 years (19%) and 35-44 years old (16%). Most survey participants lived in Napier and Hastings, and surrounding suburbs or rural areas. However, responses were received from people who lived in various locations between Mahanga and Waipawa.

**Coastal values**

- When asked what they value about the Hawke’s Bay coast, most respondents thought that the following values were all very important: natural/undeveloped coastal character (66%), appearance of the coast (61%), scenic values when looking out to sea (57%), easy access onto the coast (51%) (Figure 1).
- Most other values were still considered important to very important (e.g. values related to various recreational and access needs, iwi values) (Figure 1). People listed a range of other values as important, including: ensuring ecological well-being (e.g. fish, birds, other fauna and flora); a clean and pollution-free coastline; specific recreational pursuits (e.g. surfing, fishing, dog walking); safety (e.g. keeping vehicles off the beaches); and ensuring access for all (e.g. public, disability access).

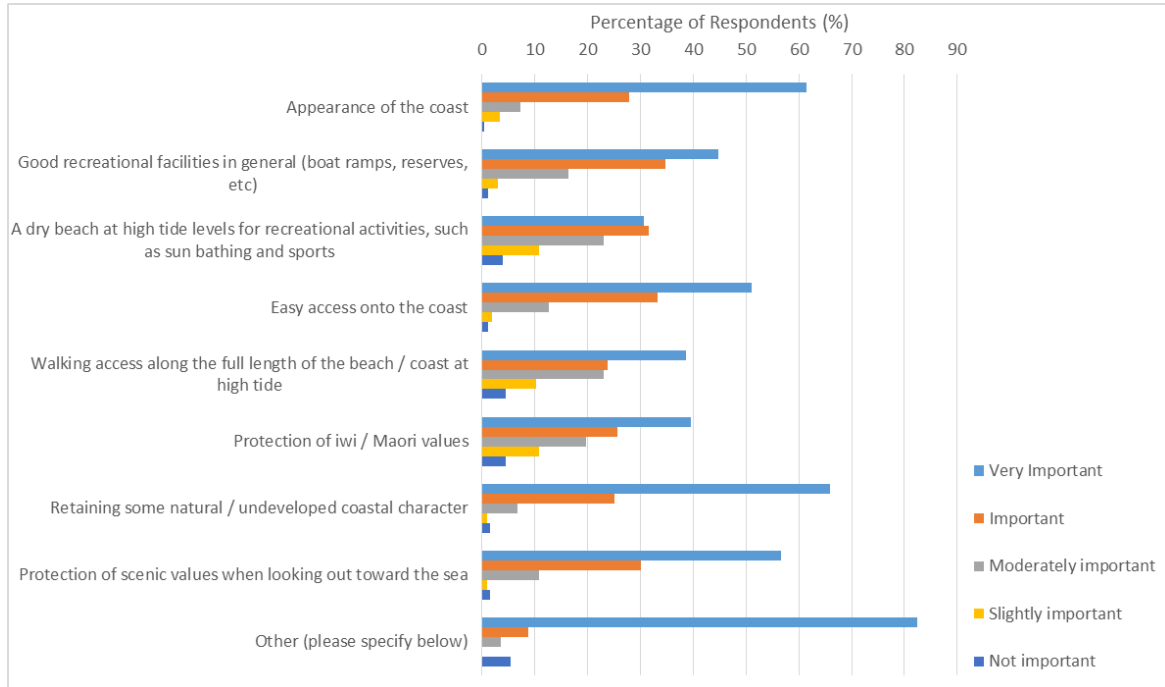


Figure 1: Responses to Q1 in the Edge coastal survey (What do you value about the coast [beach, estuary, cliff] in Hawke’s Bay? [tick one option for each value])

## Coastal hazards

- Coastal erosion was perceived as the biggest coastal issue in Hawke's Bay, followed by environmental issues (pollution, ecological diversity), over-development, and other natural hazards (sea-level rise, climate change, tsunami/earthquake).
- 69% of respondents thought that changes in coastal hazard impacts are already happening.
- 81% of respondents thought that solutions to coastal hazards are required as soon as possible, while 9% thought solutions need to be found within the next 10-20 years, and only 7% thought planning needs to occur now for the long-term, even though we might not act immediately.

## Coastal hazard management options

- Unsurprisingly, the general public's knowledge of various management options is varied and limited. When considering a suite of management options, the surveyed population thought that seawalls (43%), groynes (44%), planning controls (58%) and dune restoration (51%) could protect waterfront properties from coastal hazards *indefinitely*. 80% of respondents thought that doing nothing is not an option.
- 24% of respondents thought planned (managed) retreat is a good long-term solution, while 46% thought planned retreat could happen in stages as needed over time. 19% of respondents thought planned retreat is unacceptable.
- The public support a mixture of options over time (54%). Dune restoration (36%), groynes (35%), planning rules to limit future coastal development (31%), and seawalls (31%) were the next most popular management options selected. Perhaps unsurprisingly, people who lived further than 10 km inland thought that the top four management options are maintaining existing protection measures, doing nothing, planned retreat and the use of planning rules. This contrasted with the views of people who lived waterfront or one-two blocks from the water, who thought that groynes, seawalls, offshore bars and beach nourishment were the top four management options.

## The Strategy

- Most respondents had not heard about the Strategy (62%) and of the 38% who had heard of the Strategy, 40% had found out by word of mouth and 37% from social media.
- 56% of respondents thought that such a Strategy is a great initiative, with only 15% of people thinking it will be hard to implement.

## Coastal hazard management survey

### Section 1. Coastal values

1. What do you value about the coast (beach, estuary, cliff) in Hawke's Bay? (Please tick the option in each row that best matches your view):

	Very Important (1) ←			→ Not Important (5)	
Appearance of the coast	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Good recreational facilities in general (boat ramps, reserves, etc.)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
A dry beach at high tide levels for recreational activities, such as sun bathing and sports	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Easy access onto the coast	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Walking access along the full length of the beach/coast at high tide	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Protection of iwi / Māori values	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Retaining some natural/undeveloped coastal character	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Protection of scenic values when looking out toward the sea	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Other (please specify below)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Other:					

### Section 2. Coastal hazards and coastal hazard risk

2. Thinking about how important coastal hazards (coastal erosion, inundation/flooding, sea-level rise) and associated risk are **to you**, tick the box in each row which best describes your response for each statement:

	A great deal (1) ←			→ Not at all (5)	
I think about coastal hazards and risk	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I talk about coastal hazards and risk	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
I seek information on coastal hazards and risk	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Coastal hazards and risk could pose a threat to my property or daily activities (such as work and leisure)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

3. What do you think are the key coastal issues in Hawke's Bay at present?

Biggest issue:	
2 <sup>nd</sup> biggest issue:	
3 <sup>rd</sup> biggest issue:	



4. Have you personally or do you know anyone who has experienced any of the following coastal hazards in the past? If so, did you (or they) experience loss or damage as a result? **(tick all that apply, leave blank if none apply)**

	Personal experience of	Someone you know	Experienced loss/damage
Coastal flooding	1 <input type="checkbox"/>	1 <input type="checkbox"/>	1 <input type="checkbox"/>
Coastal erosion	2 <input type="checkbox"/>	2 <input type="checkbox"/>	2 <input type="checkbox"/>
Other coastal hazard (please describe) _____ _____ _____	3 <input type="checkbox"/>	3 <input type="checkbox"/>	3 <input type="checkbox"/>

5. Do you think coastal hazard risk in Hawke’s Bay will change in the future? **(tick one option only)**

- 1 Changes in coastal hazard impacts are already happening
- 2 Changes are likely to happen in the next 20 years
- 3 Changes are likely to happen within the next 50 years
- 4 Changes may occur beyond 50 years in the future
- 5 Unlikely to change
- 6 I don’t know
- 7 Other (please describe)\_\_\_\_\_

6. Do you think coastal hazards need to be managed sooner or later? **(tick one option only)**

- 1 Solutions need to be found as soon as possible
- 2 Within the next 10–20 years
- 3 Can be delayed for future generations to make decisions
- 4 We need to plan now how we are going to respond for the long-term, even though we might not act immediately
- 5 I don’t know

7. How do you think coastal hazard risk is currently dealt with in Hawke’s Bay? Please **circle one or more words** to describe your answer. You may also want to add your own words.

Responsibly	Irresponsibly	Sustainably	Efficiently	Other words:
Inefficiently	Fairly	Unfairly	Inclusively	
Exclusively	Cost-efficiently	Wisely	Poorly	
Well	I don’t know			



8. What do you think is the **main** cause of coastal erosion on the Hawke's Bay coast? **(tick one option only)**

- 1 Natural changes in the sediment supply to the beach
- 2 Storms
- 3 Sea-level rise
- 4 Human interference (e.g. development, seawalls)
- 5 Other cause (please describe) \_\_\_\_\_
- 6 I don't know

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### **Section 3. Coastal hazard management options and funding**

9. What sorts of options do you think will help manage coastal hazard risk in Hawke's Bay? **(tick all that apply)**

- 1 Seawalls (such as a near-vertical concrete wall or rock wall)
- 2 Groynes (structure built from the shore out into the sea to restrict the flow of sediment))
- 3 Offshore bar (sediment deposited offshore) or artificial reef
- 4 Beach nourishment (adding extra sediment to maintain natural barriers)
- 5 Planned retreat (moving buildings or communities and their facilities back from the beachfront)
- 6 Doing nothing (i.e. letting natural processes occur)
- 7 Maintain existing protection measures
- 8 Dune restoration (re-shaping dunes and planting vegetation)
- 9 The use of planning rules to limit future development in coastal hazard zones (e.g. setbacks, raising structural floor levels)
- 10 A mix of options will be needed over time in response to changing coastal hazard risk
- 11 Other options (please describe) \_\_\_\_\_

10. Who should take **primary responsibility** for implementing such management options (as listed in Q9) in Hawke's Bay? **(tick one option only)**

- 1 Local authorities (e.g. district, city, regional councils)
- 2 Central government
- 3 Waterfront property owners in Hawke's Bay
- 4 The public of the Hawke's Bay region
- 5 The New Zealand public
- 6 I don't know
- 7 Other (please describe) \_\_\_\_\_



11. When thinking about the management options listed below in the first column, please **tick one box for each of (a), (b) and (c)** that best describes what you know about the option

	(a) Can protect waterfront properties from coastal hazards indefinitely	(b) Can change the natural character of the beach	(c) Can increase coastal hazard risk elsewhere (i.e. adjacent to the option) along the coast
<b>Seawalls</b> (such as a near-vertical concrete wall or rock wall)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Groynes</b> (structure built from the shore out into the sea to restrict the flow of sediment)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Beach nourishment</b> (adding extra sediment)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Doing nothing</b> (i.e. letting natural processes occur)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Planning controls</b> (limiting future development in coastal hazard zones, raising floor/ground levels)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Offshore bars</b> (sediment deposited offshore) <b>and artificial reefs</b>	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know
<b>Dune restoration</b> (re-shaping dunes and planting vegetation)	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know	<input type="checkbox"/> <sub>1</sub> Yes <input type="checkbox"/> <sub>2</sub> No <input type="checkbox"/> <sub>3</sub> I don't know

12. Planned retreat (moving buildings or communities and their facilities back from the beachfront). **(tick all that apply)**

- <sub>1</sub> Is a good long term solution to managing changing coastal hazard risk
- <sub>2</sub> Can happen in stages as needed, over time, as necessary
- <sub>3</sub> Is unacceptable
- <sub>4</sub> I don't know





13. **In general**, how do you think coastal management options should be funded where **private property** is at risk in Hawke's Bay? (**tick all that apply**)

- 1 Only by private owners whose property is at risk
- 2 Through a targeted local community rate increase
- 3 At local council level (via rates targeted to Hawke's Bay Region waterfront property owners)
- 4 At local council level (via rates targeted to general ratepayers in the Hawke's Bay Region)
- 5 At central government level (via taxes)
- 6 A special purpose fund
- 7 Other (please describe) \_\_\_\_\_

14. **In general**, how do you think coastal management options should be funded where **public property** (e.g. reserves and roads) is at risk in Hawke's Bay? (**tick all that apply**)

- 1 By local communities or towns (e.g. via a coastal levy or duty)
- 2 At local council level (via rates targeted to Hawke's Bay Region waterfront property owners)
- 3 At local council level (via rates targeted to general ratepayers in the Hawke's Bay Region)
- 4 At central government level (via taxes)
- 5 A special purpose fund
- 6 Other (please describe) \_\_\_\_\_

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#### **Section 4. Existing management strategies in Hawke's Bay**

15. Have you heard of the Clifton to Tangoio Coastal Hazards Strategy 2120?

- 1 Yes       2 No

16. If you answered **yes** to Q15, how have you heard about the Strategy? (**tick all that apply**)

If you answered no, go to Q17)

- 1 Advertisement
- 2 Word of mouth
- 3 Social media
- 4 I am directly involved with the Strategy
- 5 Public meetings
- 6 From a community panel member
- 7 Other (please describe) \_\_\_\_\_

17. What are your thoughts on a strategy that addresses coastal issues over a 100 year period? (**tick all that apply**)

- 1 A great initiative – we need to think about the long-term
- 2 It's okay
- 3 It will be hard to implement
- 4 I don't think it'll work – it's too far into the future
- 5 Useless
- 6 I don't know
- 7 Other (please describe) \_\_\_\_\_



18. Have you participated in any public processes (e.g. public meetings, making a submission) with respect to coastal management in Hawke's Bay?

- 1 Yes (please describe) \_\_\_\_\_  
 2 No

19. Do you think there have been enough opportunities for the public to express their preferences about options for coastal protection in the Hawke's Bay Region?

- 1 Yes  
 2 No (please add here any suggestions you have for increasing public input)

\_\_\_\_\_

\_\_\_\_\_

- 3 I don't know

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### **Section 5. Personal questions**

20. What is your favourite coastal area in the Hawke's Bay region? Why?

\_\_\_\_\_

21. What suburb/community do you live in?

\_\_\_\_\_

\_\_\_\_\_

22. How would you describe the property where you live?

- 1 Coastal (waterfront)  
 2 Low lying coastal (one-two blocks away from the water)  
 3 Coastal cliff or hill (one-two blocks away from the water)  
 4 Between one-two blocks and 5 km from the coast  
 5 5-10 km from the coast  
 6 Further than 10 km inland  
 7 Other (please state) \_\_\_\_\_

23. What age are you?

- |                                  |                                  |
|----------------------------------|----------------------------------|
| <input type="checkbox"/> 1 18-24 | <input type="checkbox"/> 5 55-64 |
| <input type="checkbox"/> 2 25-34 | <input type="checkbox"/> 6 65-74 |
| <input type="checkbox"/> 3 35-44 | <input type="checkbox"/> 7 75-84 |
| <input type="checkbox"/> 4 45-54 | <input type="checkbox"/> 8 85+   |

24. What ethnicity are you?

- 1 NZ European     2 Māori     3 Asian     4 Pacific  
 5 Other (please state) \_\_\_\_\_