# Kingborough

# TINDERBOX BEACH PUBLIC CONSULTATION REPORT

### **PREPARED BY**

Kingborough Council in collaboration with Chris Rees, Impact Solutions International Pty Ltd

November 2022

# Consultation Summary

#### The Beach

Tinderbox Beach is a popular spot for swimming, snorkeling and boating. The small sandy beach and rock platforms offer a sheltered place to relax and explore the Channel and PWS Marine Reserve.

What is Happening at the Beach

Erosion at the back of the beach is natural and has been occurring for a long time. But, it is becoming more noticeable. A 1m high vertical scarp has developed and exposed old industrial fill which is now being deposited onto the beach.

During storm events and high tides, waves can hit the back of the soft shore and cause sections of the bank to collapse. The small trees that shade the beach are now being impacted as their roots are exposed to the waves.

The park behind the shore has become vulnerable due to the receding shoreline.

#### **Assessment**

Council has sought to understand how this section of beach is changing and what it might look like in future, as erosion and gradual sea level rise continue.

In 2021, Dr Chris Sharples completed a geomorphological assessment on Tinderbox Beach shoreline erosion and concluded that ongoing global sea-level rise is starting to become apparent.

Council is now in the process of determining the rate of erosion and best management practices and possible remedial actions for the beach.

Future management options presented to community



# Public Consultation

### **Community Feedback**

To help determine how to manage the impact of erosion on the beach and park, Council sought feedback from the community about how they use this area, and what they think about possible management options.

The public meeting was attended by Tinderbox residents, beach users from the surrounding area, members of user groups and representatives from the Parks and Wildlife Service and Kingborough Council.

### **Public Meeting**

A public meeting facilitated by Chris Rees, Impact Solutions was held onsite on Saturday 9 July 2022.

The meeting was promoted through signs at the beach, notices in letter boxes on the Tinderbox Peninsula, Council's website and social media channels, via email and phone with key stakeholders, user groups and individuals.

At the public meeting, Dr Chris Sharples, Geoscientist Consultant specialising in Coastal Geomorphology, Geodiversity and Landform Management, provided a summary of his 2021 Tinderbox Beach report to 21 people.

Dr Sharples took the group on a shoreline walk and discussed the issues and options.



Public notice signs placed around Tinderbox Beach



Public meeting attendees on shoreline walk

# Public Consultation

#### Survey

Circulated throughout the community after the public meeting, a survey aimed to gather information on the community's values and activities in the reserve, frequency of use and preferred options for future management.

The survey was answered by 51 respondents, 15 of whom had also attended the public meeting.

Responses to the survey and submissions are documented in this report.

### POSTCARDS

Placed in strategic locations in the municipality and handed out at the the public meeting. They contained information about the engagement and a link via a QR code to the survey





#### COMPLETE THE SURVEY TO HAVE YOUR SAY



Scan QR code to access survey or access it via the Kingborough Council website.

#### SHORELINE EROSION MANAGEMENT AT TINDERBOX BEACH

Coastal erosion is a significant issue that in recent years is happening more rapidly and becoming more noticeable. For this reason Kingborough Council have sought to understand how our coastline will be impacted by erosion and inundation with rising sea levels. As the coast continues to change it can immact how we use the land in the coastal zone.

Council wants to plan a suitable approach to lessen the impact of the erosion and protect the amenity of the reserve. We would like to present Dr. Sharples' findings to users of the beach and hear your views about the proposed management options.

### Survey responses and submissions

### Q1. If you live in Kingborough, which area do you live in?

### **Number of respondents**

- 78% Blackmans Bay/Tinderbox/ Howden Blackmans Bay/Tinderbox/Howden
- 8% Margate to Kettering
- 4% Taroona
- 4% Kingston/Kingston Beach
- 4% Prefer not to say
- 2% Sandfly or Lower Longley

Not answered by 1 respondent



# Q2. Did you attend the community discussion about shoreline erosion held at the beach on 9 July?

- 70% No (35 respondents)
- 30% Yes (15 respondents)

Not answered by 1 respondent



### Q3. How often do you visit Tinderbox Beach?

- 35.3% Frequently but seasonally
- 21.6% Once a month
- 17.6% Infrequently
- 15.7% Daily
- 9.8% Once a week



### Q4. What activities do you most often do at the beach? Please select up to three.

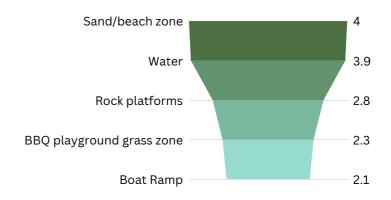
### **Number of respondents**

- 78.5% Beach visit/walk
- 54% Swimming snorkeling
- 33.3% Kayaking/paddle board etc.
- 29.4% Boating; playground and BBQ facilities/picnic
- 7.84% Diving and photography
- 3.9% Other (natural environment and cycling to the beach)



### Q5. Which feature of the beach reserve is the most valuable to you? (Please rank)

- 4 Sand/beach zone
- 3.9 Water
- 2.8 Rock platforms
- 2.3 BBQ and playground grass zones
- 2.1 Boat ramp



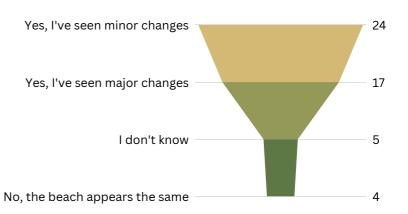
### Q6. Are you part of a group that use the beach reserve? If so which group?

- 5 Participants were part of a group.
  - Friends of TinderboxMarine Reserve = 3
  - Weedy Sea Dragon swimming group = 2



### Q8. Have you seen/experienced changes in the shoreline at Tinderbox Beach?

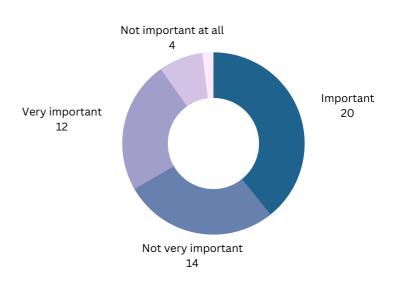
- 48% Yes, minor change
- 34% Yes, major change
- 10% I don't know
- 8% No change



**Number of respondents** 

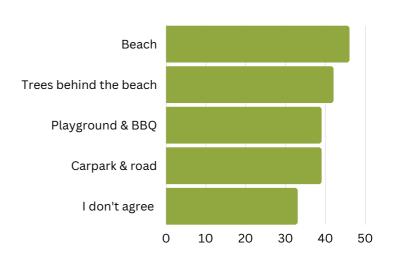
### Q9. Please indicate how important you think addressing beach erosion at Tinderbox is.

- 39.2% Important, take action in the near future
- 27.5% Not very important, take minor actions to ensure safe beach access
- 23.5% Very important, urgent action needed
- 7.8% Not important at all, allow erosion to take its course
- 2% Neutral

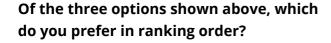


# Q10. What do you think are the most important reasons for protecting the coast at Tinderbox Beach? (Please rank)

- 46 Protect the beach
- 42 Protect trees behind the beach
- 39 Protect playground and BBQ facility
- 39 Protect carpark and road
- 33 I don't agree with these reasons



- Q11. Council is considering how to manage the shoreline erosion at Tinderbox Beach. There are three options being considered:
  - a) Managed retreat Allow the erosion to continue. This would involve managing safe beach access points and moving the park furniture and playground inland as required. We anticipate that the existing trees behind the beach would be lost and a new planting established.
  - b) Construct a temporary barrier Use sandbags or sand containers to prevent further erosion to the beach. This option holds the line for an estimated ten years and allows time for further investigation.
  - c) Hard armoring using rock Use rock to construct a barrier at the back of the beach to prevent further erosion. This solution is long term and may impact the level of sand on the beach over time. It requires design, approvals, and budget allocation.

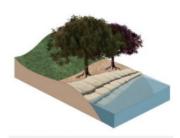


(Numbers are ranking score)

- 2.2 Managed retreat
- 2.1 Construct a temporary barrier
- 1.7 Hard armouring using rock



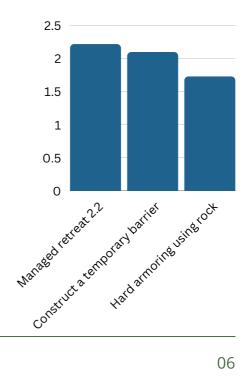
MANAGED RETREAT



SANDBAG TREATMENT



**ROCK REVETMENT** 



### Q12. Do you have any further comments on the proposed management options?

- 35 respondents answered this question
- 16 respondents did not respond to this guestion
- 8 respondents supported less intervention of the natural areas and no more major works that would have an environmental impact.
- 7 respondents supported development of a management plan, including risk assessment and an established framework.
- 3 respondents supported sandbagging.
- 2 respondents were against sandbags due to their environmental impact.



#### **Extracted quotes:**

"Desirable options would be one(s) that would ensure having a sandy beach which may shift landward as a consequence of sea level rise, similar to saltmarsh retreat where there is no hinderance to the landward migration."

"Ideally, any proposed design decisions to be made in the short term ... would be guided by appropriately qualified landscape architects with much greater design sensitivity towards and understanding of natural places and nature reserves than an urban designer might."

"While funding may not be available this financial year for the community consultation required to undertake a simple master plan for the area going forward, it would be ideal if fee proposals could be sought from appropriately experienced landscape architects who have worked with Council, Parks and multiple stakeholders in the past to successfully deliver considered and sensitive design solutions in places of historical, natural and cultural significance."

"... I would like to see less intervention and high impact on this area in the future. Council needs to support the natural values of this area, which is after all, a Marine Park, and allow for a retreat of shoreline. Please can there be no more major works at Tinderbox Beach."

"I would like further information regarding the impacts of the different solutions on the biodiversity of the area."

#### **Extracted quotes cont..**

"Whatever is implemented, I believe it should be as naturally consistent with the environment as possible. The previous use of dolerite is not in keeping with the coastline and negatively impacts the look of the area, which has becoming increasingly urbanised with the asphalt car park and boat ramp. ... Removal of the large ugly concrete platform from the beach would be most welcome!"

"As an oceanographer, I believe a combination of options a, b are probably best. Hard intervention will make the beach completely different from what it is today, defeating the propose of 'saving it'."

"Most important for future planning is to ensure an integrated vision and management plan for the next 30 years, mindful of the inherent beauty of place."

"For future management of beach erosion: a) continue monitoring of beach erosion due to both sea level rise & storm surges. b) in the next decade provide: - temporary stabilisation with long pillow sandbags/ containers (less conspicuous than smaller bags) - minimise access points to beach."

"No to hard rock armouring - it may not be successful, obtrusive and very expensive. Other local beaches will be in greater need of preventative coastal erosion."

"It is also very important that the natural values of the area are maintained and the marine reserve respected, without the sole focus being on human influenced development and provision of services."



"The low cost option of sandbags to slow the retreat seemed a good solution, potentially with larger wedge-shaped 'pillow bags' resting up against the existing scarp, perhaps with pigface planted within to 'soften/naturalise' the intervention and help screen the bag material, providing the force of wave action is not sufficient to rip them out in a single storm, as proposed on Sat. However, I had not considered the inevitable shedding of synthetic fibres which commonly occur with sandbags over time."

"... restoring the beach closer to its original shore-line has great cultural merit and is a significant reason to allow a natural retreat."

"Could the storm water pipes (two, one to the left and one to the right of centre when facing the beach) be factored into the debate as these pipes open directly onto the beach and are also impacting the sand and beach."

# Conclusion and Management Options

### by Chris Rees, Impact Solutions Pty Ltd

- 1. There is a significant community of users of Tinderbox Beach who are highly interested in the future management of the area.
- 2. Tinderbox Beach receives a significant level of use for a variety of purposes, principally for beach and water access, though the playground and BBQ are also regularly used.
- 3. Erosion at this stage is not considered critical and should be monitored in the short to medium term.
- 4. Apart from the eastern end of the beach, access is poor and even difficult and dangerous. Good access should be designed and installed at the western end and possibly the centre of the beach.

- 5. The fencing should be removed from the small reserve area at the Western end and opened up incorporating safe access to the beach, particularly for kayaking and long boarding.
- 6. Development of public infrastructure in recent times has detracted from the natural feel of the area and future infrastructure should foster a less urbanised look.
- 7. Expert landscaping advice should be sought in the development of a medium to long term plan for Tinderbox, addressing beach and access management and enhancement of natural and aesthetic values.
- 8. The marine reserve is a valuable natural asset and new signage should be developed for public education and explaining limitations on fishing activity.



Walter Synnot - Tinderbox 1840



Ariel photo (2021) annotated (Sharples 2022)



### **References:**

Geomorphological considerations in landscaping options for Tinderbox Beach and adjacent backshore, By Dr Chris Sharples, <u>Report to Kingborough Council</u> (click title for report), December 2021.

