

Temporary Coastal Protection Works, Clarkes Beach

Pre-Lodgement Community Consultation

Final Report

August 2021

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Acknowledgement of Country:

Hydrosphere Consulting acknowledges the Arakwal people of the Bundjalung Nation, Traditional Owners of the lands discussed in this report and pay tribute and respect to elders past, present and emerging.

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**JOB 21-018 - BYRON BAY COASTAL WORKS DEVELOPMENT APPLICATION
PRE-LODGE MENT COMMUNITY CONSULTATION**

REV	DESCRIPTION	AUTHORS	REVIEW	APPROVAL	DATE
0	Draft for client review	R. Campbell	M. Howland	M. Howland	9 Aug 2021
1	Final	R. Campbell	M. Howland	M. Howland	27 Aug 2021

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1. INTRODUCTION

The NSW Department of Planning, Industry and Environment – Crown Lands (DPIE - Crown Lands) constructed a sandbag seawall, imported sand and undertook dune rebuilding at Clarkes Beach in October/November 2020. The works were designed to provide temporary protection from coastal erosion in the vicinity of the Beach Byron Bay café. DPIE - Crown Lands has applied for development consent for the works to remain in place for an estimated 5 years. This will allow time for the café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach.

The *Byron Shire Council Community Participation Plan* (Byron Shire Council, 2019) describes the consultation requirements for development applications including pre-lodgement community consultation. In accordance with the Plan, the proposal is “Community Significant Development” as it will be referred to the Northern Regional Planning Panel for determination. DPIE – Crown Lands has undertaken the pre-lodgement consultation activities as specified by the Plan. This report provides a summary of the pre-lodgement consultation undertaken as part of the development application:

- Accurate details of the nature and extent of the consultation (Sections 2 and 3).
- A summary of how the community responded to the proposal and the main comments received (Section 4).
- An outline on how the submitted application has responded to the community’s concerns with meaningful changes highlighted (Section 4).
- Copies of what the community was shown during the consultation process (Appendix 2, Appendix 3 and Appendix 4).
- Copies of all submissions and/or written feedback received (Appendix 5).
- A statutory declaration that consultation was undertaken in accordance with the *Byron Shire Council Community Participation Plan* (Appendix 6).

2. NOTIFICATIONS

Written notifications were provided to approximately 250 surrounding landowners (located up to 500 m from the application site). A map of the surrounding properties is provided in Appendix 1. The notifications were hand-delivered to letterboxes for each house/unit/flat on Wednesday 23 June 2021.

Written notifications were also provided via email to known community groups (as advised by Byron Shire Council) and adjoining landowners on 23 and 24 June 2021 listed below. A copy of the notification is provided in Appendix 2:

- Community groups:
 - Tweed Byron Local Aboriginal Land Council.
 - Bundjalung of Byron Bay Aboriginal Corporation.
 - Green & Clean Dunecare.

- Byron Bay Masterplan Guidance Group.
- Byron Bay Chamber of Commerce.
- Byron Bird Buddies.
- Byron Residents' Group.
- Adjoining landowners:
 - Byron Shire Council.
 - National Parks and Wildlife Service.
 - Beach Byron Café.
 - Reflections Holiday Park.

A community notice was also placed in the local newspaper (Byron Bay Echo) on 23 June 2021 (Appendix 2) and a notice was placed at the cafe site from 23 June 2021 (Appendix 2). A project webpage was also used to advertise the meeting and provide additional information (Appendix 3) from 23 June 2021. The webpage included a feedback form.

All notices were distributed at least 12 working days prior to the meeting.

3. COMMUNITY MEETING

A facilitated community meeting was held on 9 July 2021 (on-line due to COVID restrictions). Interested community members (45) requested a link to the online meeting via email and were provided the link via email response.

The meeting was facilitated by Greg Sullivan – DPIE – Crown Lands Director Regional Operations East with presentations from Catherine Knight, DPIE – Crown Lands Manager Coastal Unit, James Carley, Principal Coastal Engineer, University of NSW Water Research Laboratory and Robyn Campbell, Senior Environmental Engineer, Hydrosphere Consulting.

The information provided at the meeting and minutes from the meeting are provided in Appendix 4.

4. FEEDBACK

Meeting attendees were able to ask questions (via the chat function and verbally) during the forum. The meeting minutes provide the questions received during the forum and responses provided (Appendix 4). Feedback was also provided via email from various respondents prior to and after the meeting (attached in Appendix 5). The feedback received before and after the meeting is summarised in Table 1. No feedback was received via the webpage feedback form. The issues raised have been addressed in the development application and supporting materials where relevant.

The feedback received confirmed the importance of the EIS process and the need for a robust analysis of coastal processes and the impacts of the proposal on the embayment as well as the immediate coastal environment. It also confirmed the importance of considering the impact of both Reflections works and the DPIE - Crown Lands works in a combined assessment. In addition, there should be consideration of the proposals in the context of the broader, longer term strategic planning processes that will be occurring over

the proposed lifetime of the works i.e. the development of a Plan of Management for the Holiday Park and the development of the CMP.

Table 1: Community feedback

Feedback (paraphrased)	No. of similar responses	Response to feedback
<i>Written feedback prior to meeting</i>		
Request for meeting link	45	Meeting link was provided.
Support for the proposal/ no objections	3	Noted
Request that more/ longer consultation with the community is undertaken	11	<p>No extension to the consultation period was considered necessary. Pre-lodgement consultation was undertaken in accordance with the <i>Byron Shire Council Community Participation Plan</i> (Byron Shire Council, 2019). All questions from meeting participants were addressed during the meeting and the meeting was extended for this purpose.</p> <p>The development application will also be publicly exhibited in accordance with the <i>Byron Shire Council Community Participation Plan</i> and legislative requirements. The Northern Regional Planning Panel may also undertake additional consultation as part of its determination. This information was provided during the meeting.</p>
Provided link to photos of erosion at Clarkes Beach	1	Noted.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Feedback (paraphrased)	No. of similar responses	Response to feedback
Additional protection of Clarkes Beach and Main Beach is required (beyond temporary coastal protection works)	1	The development application will address the temporary protection of the café with consideration of the coastal processes occurring in the embayment. DPIE – Crown Lands, Council and State Government agencies are working collaboratively with the community to develop a Coastal Management Program which will address the issue of coastal erosion in this precinct and potential management responses.
Original decision by Council to retreat from this area and need for Government and community involvement in decision-making	1	
Threat to dune and trees between café and surf club due to coastal erosion	1	
Need to protect the rest of the bay as well as commercial properties	1	
Crown Lands should facilitate whole of government response to the issue in this area	1	
Sandbags should be retained and extended from NPWS holiday dwellings to rockwall in front of the pool	2	
Questions, feedback and comments following the meeting		
Congratulations on presentations and approach	2	Noted
Sand nourishment is required to maintain the beaches and protect the cafe	2	The temporary coastal protection works included sand nourishment to establish the dune in front of the café. The options for erosion protection works within other areas of the embayment will be considered in the Coastal Management Program.
EIS is required to examine alternatives to the proposal	6	The development application will be accompanied by an EIS which examines alternatives to the proposal.
EIS must go on public exhibition	7	The development application and EIS will be publicly exhibited in accordance with the <i>Byron Shire Council Community Participation Plan</i> and legislative requirements.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Feedback (paraphrased)	No. of similar responses	Response to feedback
EIS is required to consider the whole beach and all works	1	<p>The development application and EIS will address the impacts relating to temporary protection of the café with consideration of the coastal processes occurring in the embayment.</p> <p>DPIE – Crown Lands, Council and State Government agencies are working collaboratively with the community to develop a Coastal Management Program which will address the issue of coastal erosion in this precinct and potential management responses.</p>
DA is opposed and the bags should be removed immediately with retreat of the café	12	<p>DPIE - Crown Lands is proposing to provide temporary protection to the café to allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach. The option of removing the bags immediately and the impacts associated with this alternative will be considered in the EIS.</p>
Benefit of removing the bags is ending the end effect erosion	8	<p>The coastal processes assessment accompanying the development application investigates the impacts of the proposal on coastal processes and the required mitigation measures.</p>
Removing the bags will reduce turbulence and associated erosion at the bags	6	
High escarpment of the bags is the reason for lack of natural accretion of sand moving around the Cape	5	
This project could conflict with or hold up the CMP development process	4	<p>DPIE – Crown Lands and other State Government agencies are working collaboratively with Council to support them in the development of a Coastal Management Program which will address the issue of coastal erosion in this precinct and potential management responses. DPIE - Crown Lands has established a Working Group to discuss issues and information common to the strategic planning being undertaken in this area. These actions will assist with CMP development and ensure that the projects are aligned and integrated. No delays to the CMP are expected as a result of the development application.</p>
No work should proceed until the CMP is completed	1	
Byron Shire must have a CMP to protect beaches	1	

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Feedback (paraphrased)	No. of similar responses	Response to feedback
The Reflections sandbag proposal should be dealt in unison with the Crown Lands sandbag proposal	2	<p>NSW Crown Holiday Parks Land Manager (trading as Reflections Holiday Parks) has submitted a development application for the sandbag seawall adjacent to the holiday park.</p> <p>Although the two proposals are separate, a combined assessment of the impact of the two proposals on coastal processes will be undertaken and submitted with both development applications, acknowledging that the structures are contiguous.</p> <p>Council will determine the manner in which it assesses the two development applications.</p>
DCP Part J requires structures within the immediate, 50 year and 100-year erosion zone to be demountable to allow natural erosion processes to occur	1	<p>The works were installed in accordance with section 19(2) of <i>State Environmental Planning Policy (Coastal Management) 2018</i>. The works were designed to provide temporary protection to allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach.</p> <p>The sandbag wall installed in front of the café is designed to be temporary and removable. The proposed method of removal will be documented in the EIS. The EIS will examine the consistency of the proposal with any relevant requirements of DCP Part J.</p>
Risks and impacts of attempting protection and difficulties associated with sand nourishment (refers to 2006 Patterson Britton and Partners study)	1	<p>The coastal processes assessment accompanying the development application investigates the impacts of the proposal on coastal processes and the required mitigation measures.</p> <p>Additional sand nourishment is not proposed as part of the development application (apart from maintenance of the existing works). The options for erosion protection works within the embayment will be considered in the Coastal Management Program.</p>
The need for the café bags was due in part to the Reflections bags	7	<p>The EIS will outline the rationale for the proposal. The coastal processes assessment accompanying the development application has considered the potential impacts of the sandbag walls including the extent of “end effect” erosion of the walls, both separately and combined.</p>

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

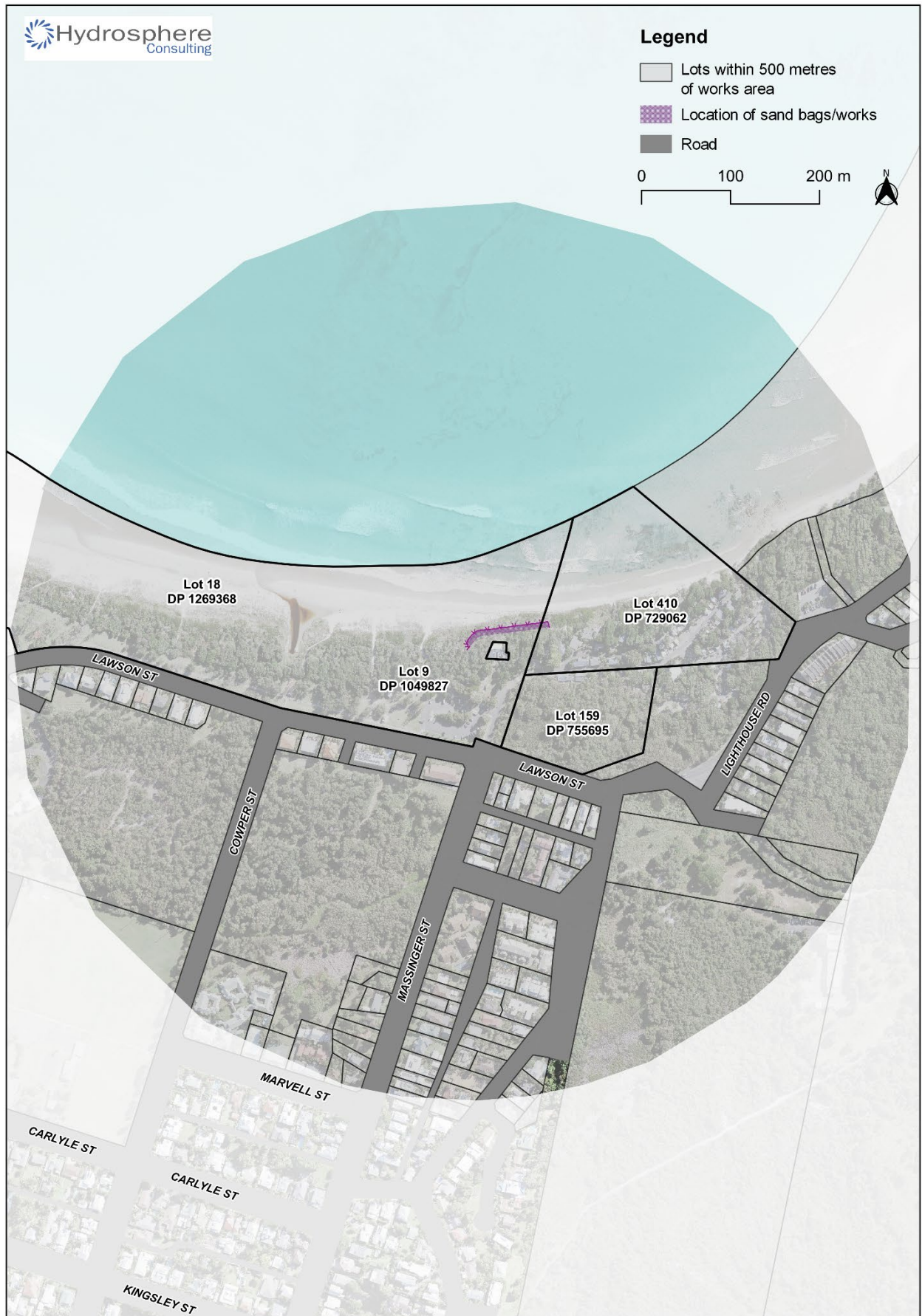
Feedback (paraphrased)	No. of similar responses	Response to feedback
More scientific research into coastal processes and climate change is required	1	<p>The coastal processes assessment accompanying the development application investigates the impacts of the proposal on coastal processes and the required mitigation measures.</p> <p>DPIE – Crown Lands, Council and State Government agencies are working collaboratively with the community to develop a Coastal Management Program which will address the issue of coastal erosion in this precinct and potential management responses. DPIE - Crown Lands has established a Working Group to discuss issues and information common to the strategic planning being undertaken in this area.</p>
Uncontrolled beach access surrounding Reflections sandbags	1	<p>DPIE - Crown Lands is working with Council and Reflections to coordinate plans for beach access and revegetation works in this area.</p>
Structures on dune and inappropriate vegetation appear to be the reason the dune is eroding	1	

REFERENCES

Byron Shire Council (2019) *Byron Shire Council Community Participation Plan*, October 2019

APPENDIX 1 SURROUNDING PROPERTIES

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation



APPENDIX 2 WRITTEN NOTIFICATION, NEWSPAPER NOTICE AND SITE NOTICE

Ref: 21-018

Date: 22/6/21

Attn: Landowners and community members

RE: Pre-lodgement community engagement - coastal protection works at Clarkes Beach, Byron Bay

The NSW Department of Planning, Industry and Environment – Crown Lands (Crown Lands) constructed a sandbag seawall and undertook dune rebuilding and imported sand to Clarkes Beach in October/November 2020. The works were designed to provide temporary protection from coastal erosion. Crown Lands now intends to apply for development consent for the works to remain in place for an estimated 5 years. This will allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach.

Hydrosphere Consulting is providing project management and environmental assessment services to Crown Lands for this project.

Notification of community meeting

The project team will hold an online session to provide information and obtain feedback on the proposal on Friday 9 July 2021, from 10 am to 11 am.

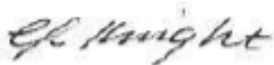
Interested residents can register their interest and receive a link to the online session by emailing robyn@hydrosphere.com.au by 6 July 2021.

You can also submit your feedback on the proposed development up until 16 July 2021 to robyn@hydrosphere.com.au.

Council will undertake further community consultation once the development application has been submitted, as part of the exhibition process.

Please find attached some information on the proposal.

Yours sincerely,



Catherine Knight
Manager Coastal Unit
NSW Department of Planning, Industry and Environment – Crown Lands

Coastal protection works at Clarkes Beach, Byron Bay

Clarkes Beach has been subject to significant coastal erosion over recent years, notably since July 2019 and July 2020 when storm events coincided with high spring tides, causing significant erosion of the dunes.

Crown Lands constructed a temporary sandbag seawall, undertook dune rebuilding, and imported sand to Clarkes Beach in October/November 2020. The work was designed to mitigate, over the short term, coastal erosion risks to the adjacent Crown reserve and 'Beach Byron Bay' café (the café).

The work consisted of approximately 650 sandbags forming a sandbag wall approximately 80 m long and 7 m deep, constructed on a geotextile underlayer with sand backfill. Over 2,700 m³ of clean beach sand has been imported to the site to re-build the frontal dune behind the sandbag wall.



Sandbag wall works– Clarkes Beach (February 2021)

The current proposal will seek development consent to retain the coastal protection works for an estimated five years. This will allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach. The precinct plan will be developed in collaboration with stakeholders including the adjoining Reflections Holiday Park and Byron Shire Council.

As part of the proposal, Crown Lands will also undertake dune revegetation work to increase the stability of the frontal dune.

The development application will be accompanied by an Environmental Impact Statement (EIS) and will be referred to the Northern Regional Planning Panel for determination. As part of the EIS, the project team will consider any potential environmental impacts and recommend any needed mitigation strategies in accordance with local, State and Federal legislation. The development application and EIS will be placed on public exhibition on Byron Shire Council's website during the development assessment period and the community will have the opportunity to provide feedback.

For more information please visit: dpie.nsw.gov.au/clarkesbeach

Byron Bay Echo (23 June 2021, p6) www.echo.net.au



HAVE YOUR SAY

Coastal protection works Clarkes Beach, Byron Bay

The NSW Department of Planning, Industry and Environment - Crown Lands has constructed a sandbag seawall, undertaken dune rebuilding and imported sand to Clarkes Beach to provide temporary protection from coastal erosion.

The department is planning to submit a development application to Byron Shire Council to retain the sandbags and dune revegetation work for an estimated 5 years.

This will allow time for a precinct plan to be implemented to manage coastal erosion at Clarkes Beach, in collaboration with stakeholders including the adjoining Reflections Holiday Park and Byron Shire Council.

The project team will hold an online session to provide information and obtain feedback from the community on:
Friday 9 July 2021, 10 am to 11 am

To register your interest and receive a link to the online session, please email robyn@hydrosphere.com.au by 6 July 2021.

You can submit feedback on the proposed development up until **16 July 2021** to robyn@hydrosphere.com.au

Council will undertake further community consultation once the development application has been submitted, as part of the exhibition process.

For more information please visit:
dpie.nsw.gov.au/clarkesbeach

RLZ LP2569

Site notice

HAVE YOUR SAY

Coastal Protection Works – Clarkes Beach, Byron Bay

The NSW Department of Planning, Industry and Environment – Crown Lands has constructed a sandbag seawall, undertaken dune rebuilding and imported sand to Clarkes Beach to provide temporary protection from coastal erosion.

The department is planning to submit a development application to Byron Shire Council to retain the sandbags and dune revegetation work for an estimated 5 years. This will allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach.

The project team will hold an online session to provide information and obtain feedback from the community on:

Friday 9 July 2021, 10 am to 11 am.

Interested residents can register their interest and receive a link to the online session by emailing robyn@hydrosphere.com.au by **6 July 2021**.

You can also submit your feedback on the proposed development up until **16 July 2021** to robyn@hydrosphere.com.au

Council will undertake further community consultation will be undertaken once the development application has been submitted, as part of the exhibition process.

For more information please visit: dpie.nsw.gov.au/clarkesbeach



Sandbag seawall works – Clarkes Beach (February 2021)

Site notice locations – on temporary construction compound fencing for stormwater improvements adjacent to café and on tree adjacent to cafe



APPENDIX 3 PROJECT WEBPAGE

[dpie.nsw.gov.au/clarkesbeach](https://www.industry.nsw.gov.au/lands/public/on-exhibition/pre-lodgement-community-engagement-clarkes-beach-byron-bay) (<https://www.industry.nsw.gov.au/lands/public/on-exhibition/pre-lodgement-community-engagement-clarkes-beach-byron-bay>)

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Notifications

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Pre-lodgement community engagement: Clarkes Beach, Byron Bay >

Community Notice: Lake Illawarra jetties consultation

Grazing licence opportunity at Tingha

State Strategic Plan for Crown land

Proposed demolition of former Saltwater Cafe, Bermagui

Proposed lease of Katoomba Airfield

Expression of interest for Hungry Point Reserve and Trust

Changes to public access to Coffs Harbour Fishermen's Co-operative

Wollongong Harbour draft master plan

Leases and sales

Community Engagement Strategy

Pre-lodgement community engagement: coastal protection works at Clarkes Beach, Byron Bay



Sandbag wall works - Clarkes Beach (February 2021)

The NSW Department of Planning, Industry and Environment – Crown Lands (Crown Lands) constructed a sandbag seawall and undertook dune rebuilding and imported sand to Clarkes Beach in October and November 2020. The works were designed to provide temporary protection from coastal erosion. Crown Lands now intends to apply for development consent for the works to remain in place for an estimated 5 years. This will allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be developed and implemented to manage coastal erosion at Clarkes Beach.


Notification of Community Meeting

The project team will hold an online session to provide information and obtain feedback on the proposal on **Friday 9 July 2021, from 10 am to 11 am**.

Residents can register their interest and receive a link to the online session by emailing robbyn@hydrosphere.com.au by **cob 6 July 2021**.

[Plans of management](#)

Have your say

You can submit your feedback on the proposed development up until 4:30 pm 16 July 2021 to robyn@hydrosphere.com.au .

Your feedback will be considered in the development application (DA) and Environmental Impact Statement (EIS) to be submitted to Byron Shire Council.

Council will undertake further community consultation once the development application has been submitted, as part of the exhibition process.

The Proposal

Clarkes Beach has been subject to significant coastal erosion over recent years, notably since July 2019 and July 2020 when storm events coincided with high spring tides, causing significant erosion of the dunes. Crown Lands constructed a temporary sandbag seawall and undertook dune rebuilding and imported sand to Clarkes Beach in October/November 2020. The work was designed to mitigate, over the short term, coastal erosion risks to the adjacent Crown reserve and 'Beach Byron Bay' café (the café).

The work consisted of approximately 650 sandbags forming a sandbag wall approximately 80 m long and 7 m deep, constructed on a geotextile underlayer with sand backfill. Over 2,700 m³ of clean beach sand has been imported to the site to re-build the frontal dune behind the sandbag wall.



Clarkes Beach Holiday Park is located to the east of the works site. Previous coastal erosion fronting Clarkes Beach Holiday Park to the east of the café has been managed by the construction of temporary sandbag walls in July 2019 by NSW Crown Holiday Parks Land Manager (trading as Reflections Holiday Parks). The Crown Lands sandbag seawall ties in with the western extent of the sandbag seawall installed by Reflections Holiday Parks. The Reflections seawall is the subject of a separate development application by Reflections Holiday Parks.



Aerial view of sandbag wall and beach nourishment in front of café and adjacent sandbag wall in front of Reflections Holiday Park – Clarkes Beach (January 2021)

The current proposal will seek development consent to retain the coastal protection works for an estimated five years. This will allow time for the Beach Byron Bay café to be reconfigured and/or relocated, and for a precinct plan to be implemented to manage coastal erosion at Clarkes Beach. The precinct plan will be developed in collaboration with stakeholders including the adjoining Reflections Holiday Park and Byron Shire Council. Crown Lands will continue to collaborate with Byron Shire Council throughout the development of a Coastal Management Program for the Byron Bay embayment.

As part of the proposal, Crown Lands will also undertake dune revegetation work to increase the stability of the frontal dune.

The development application will be accompanied by an EIS and will be referred to the Northern Regional Planning Panel for determination. As part of the EIS, the project team will consider any potential environmental impacts and recommend any needed mitigation strategies in accordance with local, State and Federal legislation. The EIS will be informed by detailed assessments of coastal hazards, impacts on biodiversity and cultural heritage. The development application and EIS will be placed on public exhibition during the development assessment period and the community will have the opportunity to provide feedback.

[Contact Us](#)

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APPENDIX 4 MEETING PRESENTATION AND MINUTES

Clarks Beach Temporary Seawall DA

Pre-lodgement Community Information Session

Record of Meeting

Location:	MS Teams (noting COVID restrictions in place for NSW)
Date/time:	Friday, 9 July 2021, 10:05 am to 11:30 am
Chairperson:	Greg Sullivan, Director Regional Operations East, NSW Department of Planning, Industry & Environment - Crown Lands (DPIE-CL)
Presenters:	Catherine Knight, Manager Coastal Unit, DPIE-CL James Carley, consulting coastal engineer to DPIE-CL, UNSW Sydney - Water Research Laboratory (UNSW WRL) Robyn Campbell, consulting environmental planner and engineer to DPIE-CL, Hydrosphere Consulting
Other DPIE Attendees:	Malcolm Robertson, DPIE-CL Bryan Green, DPIE-CL Ben Fitzgibbon, DPIE-Environment, Energy & Science (EES) Marc Daley, DPIE-EES
NSW Crown Holiday Parks Land Manager:	Cameron Clark, Reflections Holiday Parks Lisa Van Dyke, Reflections Holiday Parks
Community Attendees:	23 community attendees (refer Table 1).
Organiser:	Malcolm Robertson, DPIE-CL
Presentations:	10:05 am to 10:45 am (copy of presentations, refer Attachment 1)
Q&A session:	10:45 am to 11:30 am (refer Table 2)

Table 1 List of Community Attendees

Ref #	General Public	Organisation (where indicated by attendee)
1	Duncan Dey	
2	Oliver Dunne	
3	Roxanne Poulin	
4	James Trevillion	
5	Sally Warriner	
6	Reid Waters	
7	David Giddy	
8	Phil Micallef	
9	Kirsty Pockley	Byron Surf Club member
10	Jeremy Courmadias	
11	Ian Smith	
12	Hans Lovejoy	Byron Shire Echo
13	Kris Graham	
14	Jim Kalokerinos	
15	Ben Kirkwood	Beach Byron Bay
16	Paul Margolin	
17	Anny Reed	
18	Lyn Leger	Byron Masterplan Community Group member
19	Reid Waters	
20	Mark Swivel	
21	Robin Ormerod	

Ref #	General Public	Organisation (where indicated by attendee)
22	Kate Cato	
23	Forster Rayward	

Table 2 Overview of Q&A session

Ref #	Speaker	Questions ('chat' questions in <i>italics</i>)	Responses
1	Q - Community member A – UNSW WRL	The UNSW WRL presentation showed that from 2007 to 2013, 13 – 26 m of the beach was eroded. What happened before that - was there significant accretion up to 2007?	From as far back as records allow, the Byron Bay embayment has been shown to cycle through periods of erosion and accretion. However, these cycles have been underlined by a long-term trend of recession of approximately 20 cm per year. There was significant accretion up to 2007. The long-term recession is driven by natural and geological processes.
2	Q – Community member A – DPIE-CL	What is the basis on which 5 years is deemed to be needed for the relocation / reconfiguration of the Clarkes Beach café? When the cafe was first built, they would've applied the retreat principle. Why 5 years and not 2 years?	This development application (DA) process is a lengthy one, and it will take time to resolve the broader issues in consideration of the broader precinct, which will require further community engagement. For example, there are complex planning and approval requirements, land ownership and management arrangements that need to be worked through to reconfigure and/or relocate the café. In this context, 5 years is considered an appropriate period of time for the temporary works to be in place.
3	Q – Community member A – DPIE-CL	<i>From the presentation, I understand that the bags will be left in place if there is accretion over the 5yr period. Is that correct? (i.e. only be removed if exposed at the end of the 5yrs?)</i>	As part of the DA we will look at different triggers and adopt an adaptive approach to determine the best time to remove the sandbags. For example, we may decide to remove the sandbags when the beach is in an eroded state and the bags are exposed.
4	Q – Community member A – DPIE-CL	<i>Who will pay for the removal?</i>	The Department of Planning, Industry and Environment – Crown Lands (the department) will pay for the removal of the sandbags.

Ref #	Speaker	Questions ('chat' questions in <i>italics</i>)	Responses
5	Q - Community member A – UNSW WRL	<i>...The latest assessment, does that assume the status quo for the Johnson Street Protection Works (JSPW)? Will this change the outcome for the works/DA if alternate protection measures are put in place for JSPW... taking out the JSPW is what I'm concerned about ...</i>	The Jonson Street Protection Works influence Main Beach to the east for about several hundred metres – they are far enough away to not influence Clarkes Beach. Clarkes Beach is more affected by sand movement around Cape Byron, Wategos and The Pass, which largely determines the sand transport processes at this location.
6	Q – Community member A – DPIE-CL	<i>As UNSW WRL discussed, there is an end of sea wall effect. I assume there has been some end of sea wall effect from the bags which is impacting on the beach access west of Clarkes. I respect this is a council managed area however hope beach access is continually addressed over the next 5 years. Is this the case?</i>	As part of the DA, we are investigating the reinstatement of the beach access to the west, in consultation with Council. The beach access adjacent to the bags would be managed by the department in consultation with Council over the 5-year period.
8	Q – Community member A – DPIE-CL	Will the community have a chance for input and a say around the various options / triggers for the decommissioning of the works?	The decommissioning process will be set out in the DA documents. There will be further opportunities to provide feedback when Council places the DA on public exhibition for 28 days.
9	Q – Community member A – DPIE-CL and UNSW WRL	<i>Council has been told the stormwater outlet has no impact, but has not sought expert advice on that. Will the EIS do that?</i>	The stormwater outlet, located within Reflections' site, is not part of the scope of the EIS for the department's DA. However, the impact of the stormwater outlet is believed to be very minor in geological scales and insignificant in comparison to the amount of sediment that moved through the embayment each year.

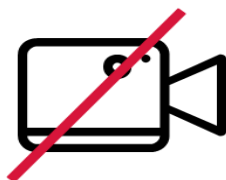
Ref #	Speaker	Questions ('chat' questions in <i>italics</i>)	Responses
10	Q –Community member A – DPIE-CL	Will NSW Government or Council pay for the sand bypass study?	Coastal management options and strategies will be assessed through the development of the Coastal Management Program (CMP). Byron Shire Council are leading the development of the Coastal Management Program (CMP), with support from the NSW Government and the Coast and Estuary grants program. Council has investigated a sand bypass system before – as part of a broader scale management intervention for the whole embayment.
11	Q – Community member A – UNSW WRL	<i>Question to UNSW WRL, my concern is that we are dealing with the problem in a demented (segmented?) manner. How much of the Main Beach dune was rebuilt after mining and the construction of Lawson Street?</i>	This project concerns a small part of the embayment. Previous studies indicate that sand mining had very little impact – and is not the primary cause of what is happening now. Long term recession of the embayment is a natural process.
12	Q – Community member A – DPIE-CL and UNSW WRL	<i>Council's options it presented for main beach, there appears little detail on artificial reefs. Is there a reason why this option is not being presented or investigated? I understand that this relates to council's coastal management plan...</i>	Coastal management options and strategies will be assessed through the CMP process. UNSW WRL undertook a global review of artificial reefs approximately ten years ago – the report is available online (refer link below). https://www.wrl.unsw.edu.au/sites/wrl/files/uploads/Publications/WRL-TR2012-08-Final-June-Artificial-Reefs.pdf

Ref #	Speaker	Questions ('chat' questions in <i>italics</i>)	Responses
13	Q – Community member A – DPIE-CL	It was mentioned that there are options being looked at to relocate the café – where will the café go?	The department is working with the café owner on the options available to reconfigure and/or relocate the café. It is likely to be a complex process, and may require a new DA. The options need to be considered in terms of the broader precinct, with a plan to be developed in collaboration with stakeholders, including the adjoining Reflections Holiday Park and Byron Shire Council.
14	Q – Community member A – DPIE-CL	Will this DA propose additional sandbags or is to just allow the existing sandbags to stay for 5 years?	The current proposal will seek development consent to retain the existing coastal protection works for an estimated five years.
15	Q – Community member A – DPIE-CL	<p>We seem to be dealing with the issues in a segmented manner, and not in consideration of the whole embayment and Council's role in the broader issues.</p> <p>There is a negative view of sand pumping by Councillors, which may be based on misunderstanding regarding the size and scale of potential operations. The sand pumping options need further exploration/clarification, with reference to past investigations and reports (e.g. UNSW WRL and BMT WBM reports).</p> <p>Having been involved in the issue since the late 1970s, there is a risk that what Crown Lands are doing, quite rightfully, will push back further, the need for Council to address the issues across the whole embayment i.e. from Clarkes Beach to Belongil.</p>	<p>The department will continue to work with Byron Shire Council to support the development of the CMP. A working group has been established which includes council and a range of state agencies.</p> <p>A Coastal Management Study was prepared by UNSW WRL in 2016. It examined sand bypassing and various other coastal management options. Link to coastal management study by UNSW WRL:</p> <p>https://www.byron.nsw.gov.au/Services/Environment/Coast-and-waterways/Coastal-planning</p>

Ref #	Speaker	Questions ('chat' questions in <i>italics</i>)	Responses
16	Q – Community member A – DPIE-CL, DPIE-EES and UNSW WRL	Is there an opportunity to have a similar session to further explore the connection between your understandable intervention (under the DA) and the larger coastal management plan with reps from state government and local council? Would be surprised if this group would not support that.	There will be more community consultation opportunities available as part of the CMP process and as part of the development of Reflections' Holiday Park Plan of Management.

Temporary Coastal protection works at Clarkes Beach

Session start time - 10:05am



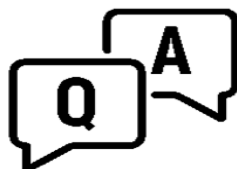
Turn off your camera



Mute yourself



Use the chat box



Dedicated Q&A
time



Closed captions
is available



Presentation will be
available



Today's session will
be recorded



Temporary Coastal protection works at Clarkes Beach

Development Application
Pre-Lodgement Community Consultation
Meeting – 9 July 2021

Department of Planning, Industry
and Environment – Crown Lands



Acknowledgement of Country

We acknowledge that today we meet on many Aboriginal lands.

We acknowledge the traditional custodians of the lands and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work.



Planning,
Industry &
Environment

Nikita Ridgeway

1. Introduction

DA Pre-consultation – Clarkes Beach

Greg Sullivan
Director Regional Operations East
Crown Lands
Department of Planning, Industry and Environment



Agenda

1. Acknowledgment of Country and Introduction

Greg Sullivan – Crown Lands

2. Overview of Project

Catherine Knight – Crown Lands

3. Coastal Processes Assessment

James Carley – Water Research Laboratory

4. Development Application Considerations

Robyn Campbell - Hydrosphere

5. Q&A Session



2. Overview of Project

DA Pre-consultation – Clarkes Beach

Catherine Knight
Manager Coastal Unit
Crown Lands
Department of Planning, Industry and Environment



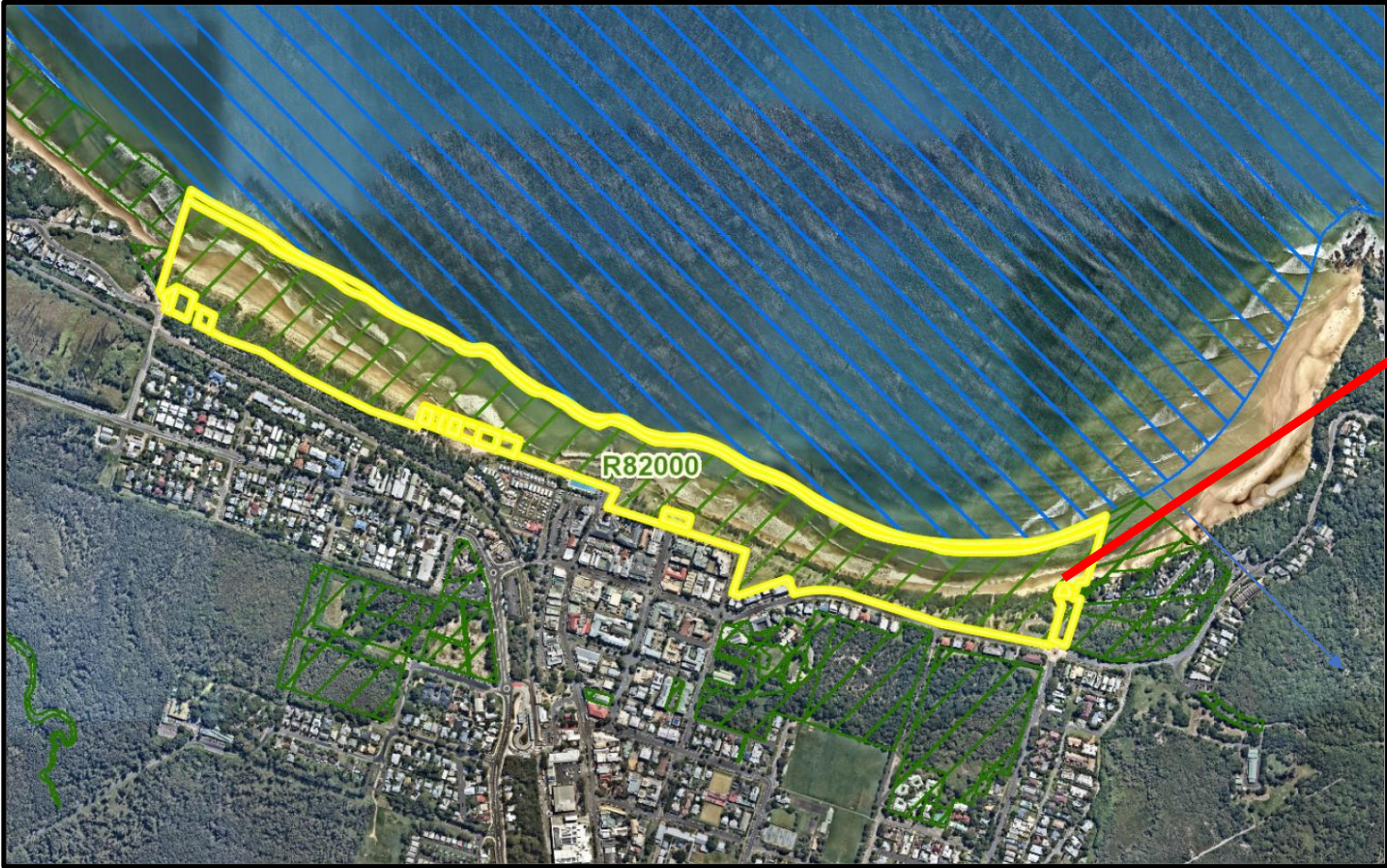
Overview of Project

- Clarkes Beach – public land management arrangements
- Temporary coastal protection works
- Project Objectives
- Longer term

Reflections Holiday Park



Clarkes to Main Beach



July 2020



8 July 2020 – pre ECL



22 July 2020 – post ECL

16 October 2020



Whites Cottage



Background to the temporary works

- October 2020 : Café building at risk of collapse
- November - December 2020: temporary sandbag seawall and associated beach nourishment works installed
- Since early 2021 - Development Application being prepared to extend the current approval to 5 years

Project objectives

1. Provide a degree of temporary protection to the Beach Byron Bay café from coastal erosion.
2. Provide sufficient time to achieve the reconfiguration and/or relocation of the Beach Byron Bay café.
3. Ensure that risks from coastal erosion to public safety and beach access, are mitigated over the period the temporary works are in place.

2021



26 February 2021



24 June 2021

Longer term response required

- Crown Lands, Reflections and café owner working together, focusing on a 'precinct-based approach', this includes the reconfiguration and/or relocation of the café, and a new plan of management for the holiday park.
- Clarkes Beach Working Group convened by the department - agencies and public land managers.
- Membership of the working group includes Reflections, Byron Shire Council, Arakwal, DPIE-EES (Coast and Estuary Group), and Cape Byron Marine Park.
- Integration with the Coastal Management Program, being prepared by Byron Shire Council.

3. Coastal Processes Assessment

DA Pre-consultation – Clarkes Beach

James Carley
Principal Coastal Engineer
Water Research Laboratory



Clarkes Beach Byron Bay

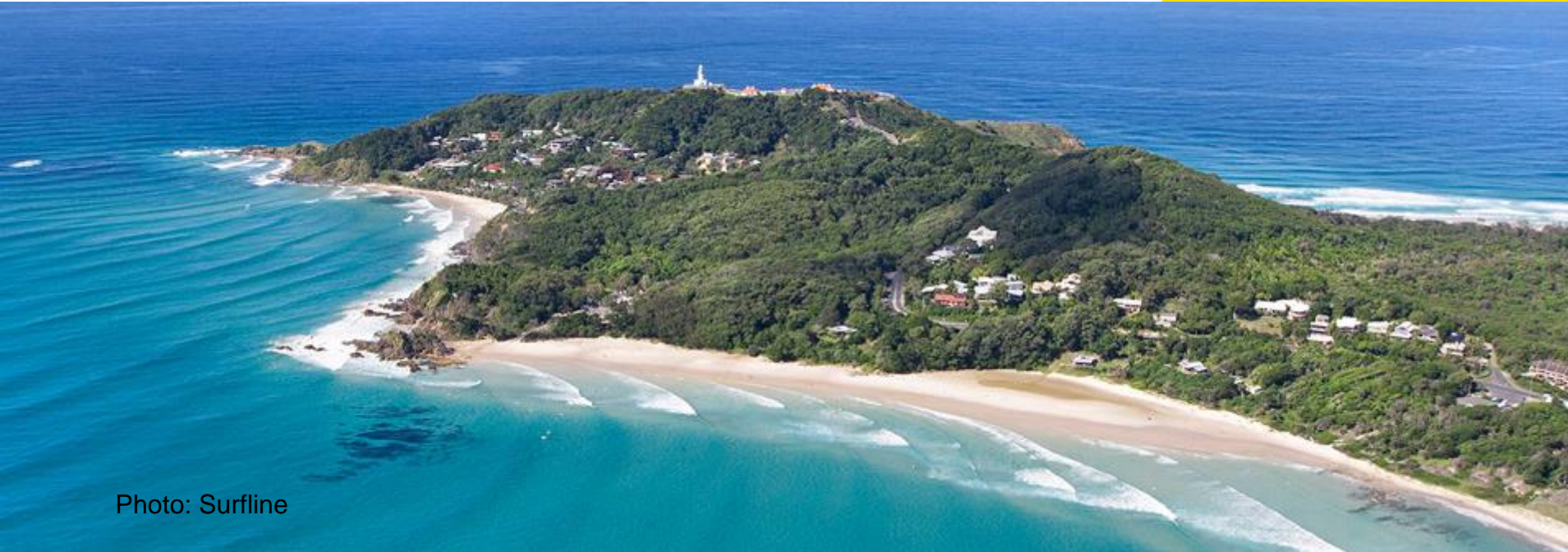


Photo: Surfline



UNSW
Water Research
Laboratory

James Carley – Principal Coastal Engineer
Water Research Laboratory, UNSW Sydney



Foreshore features and change (November 2020)



2007 to 2020 change

Minimal erosion of the 3 m AHD contour from The Pass to the Captain Cook car park/ Thompsons Rock just east of Reflections,

Due to the predominance of rock outcrops (including Thompsons Rock, Figure 2.2) backing the beach

Horizontal erosion of 13 to 26 m between the Captain Cook/ Thompsons Rock car park and Jonson Street

Foreshore features and change (November 2020)



10/03/2007 11/04/2020 04/07/2020 04/09/2020 26/11/2020 04/12/2020 Basemap 26/11/2020

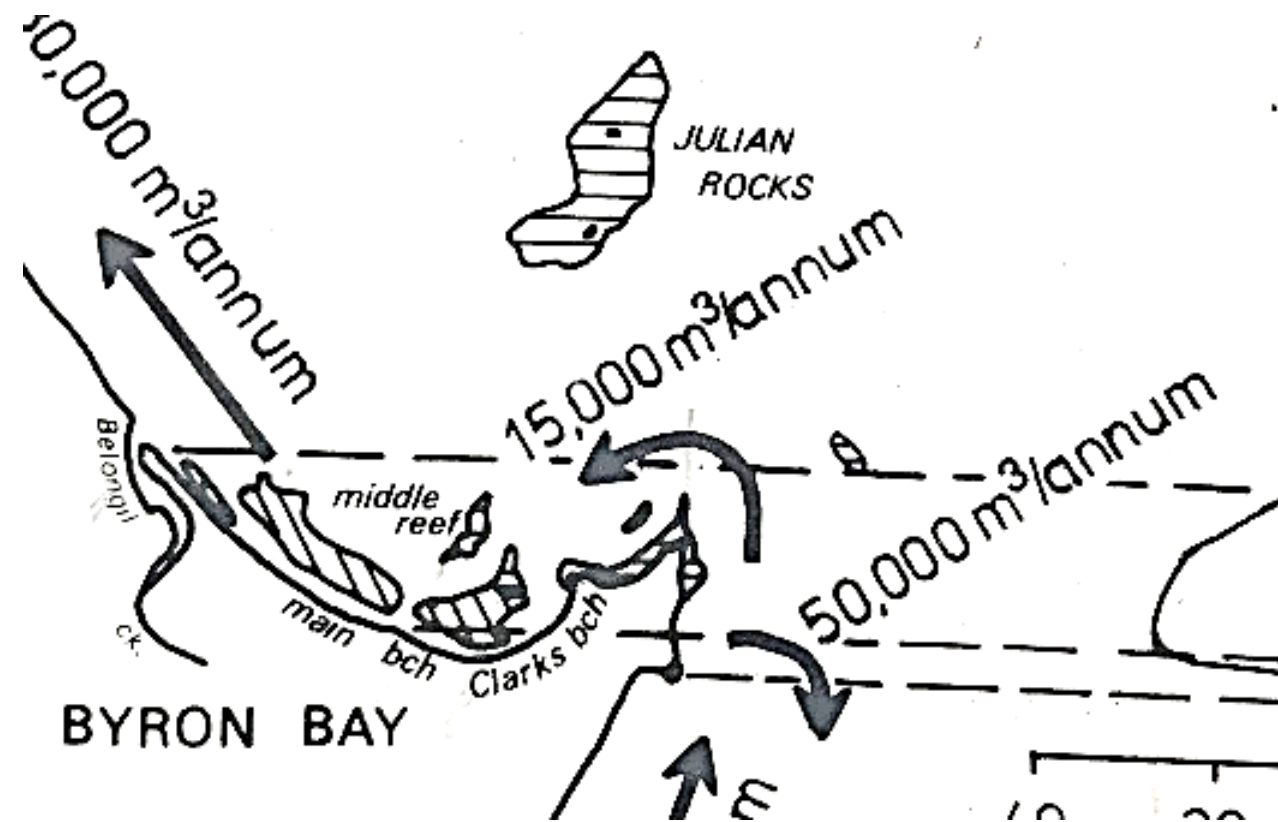
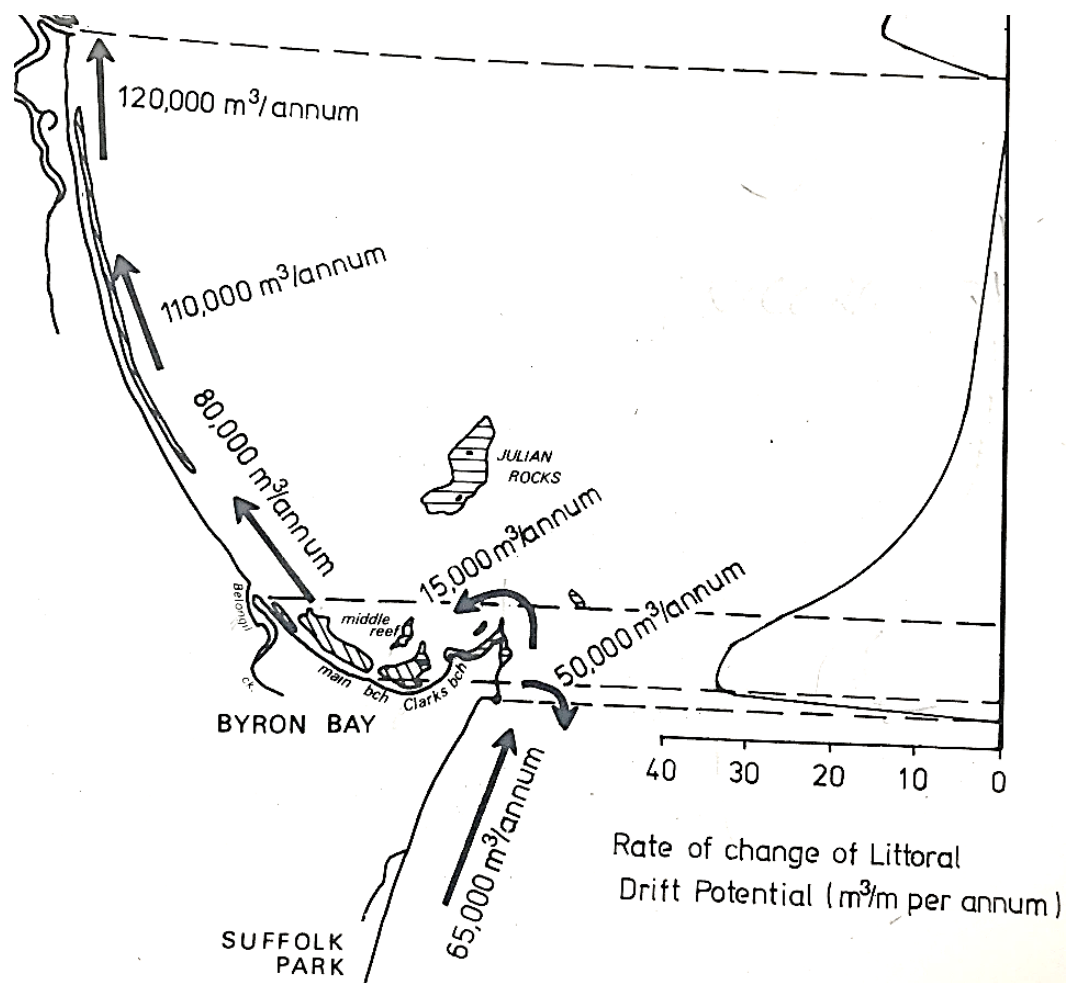
Coastal processes and hazards

Numerous studies of the coastal processes, sand transport, coastal hazards and coastal management for Byron Bay. Many of these have focussed on Belongil where approximately 50 houses are vulnerable to coastal hazards.

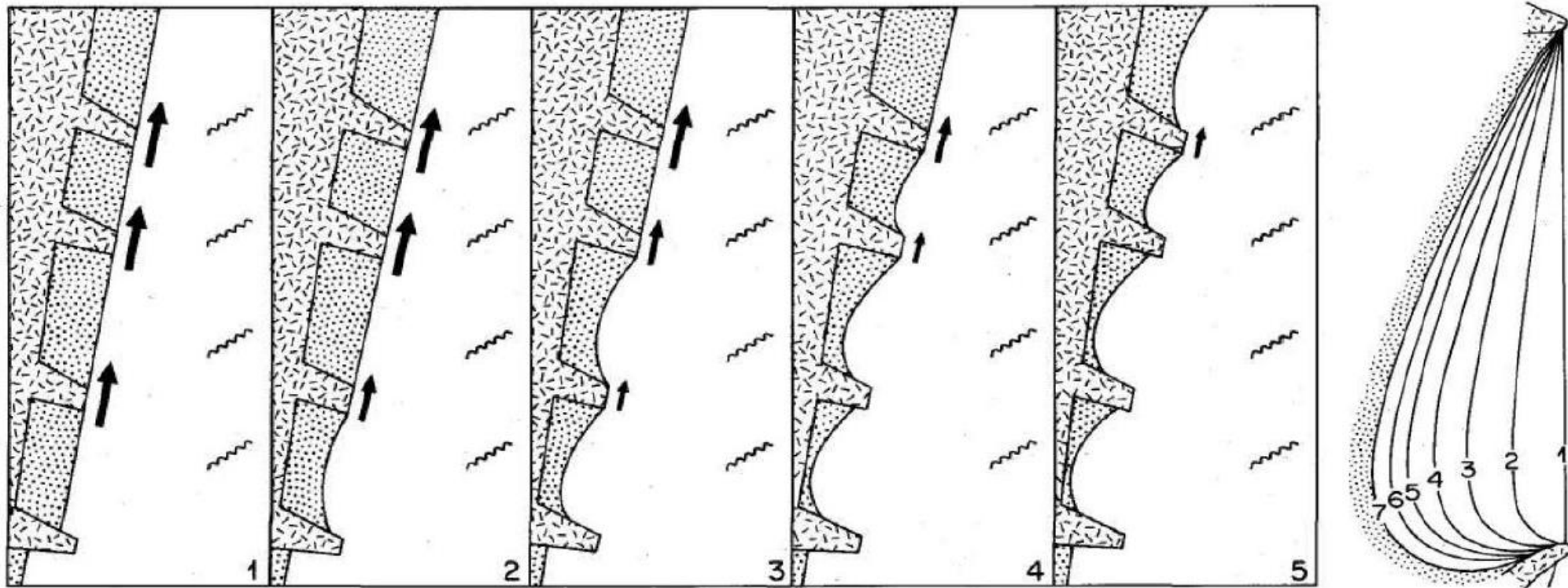
The major studies have been:

- PWD (Gordon et al, 1978)
- WBM (2002)
- WRL/Carley (2007)
- Patterson (2010)
- WRL/Carley (2011)
- Gordon (2011)
- BMT WBM (2013)
- Goodwin et al (2013)
- WRL/Carley (2016)
- Carley et al (2017)
- Murray/GCCM (2020)

PWD (Gordon, 1978)



Stephens et al (1981)

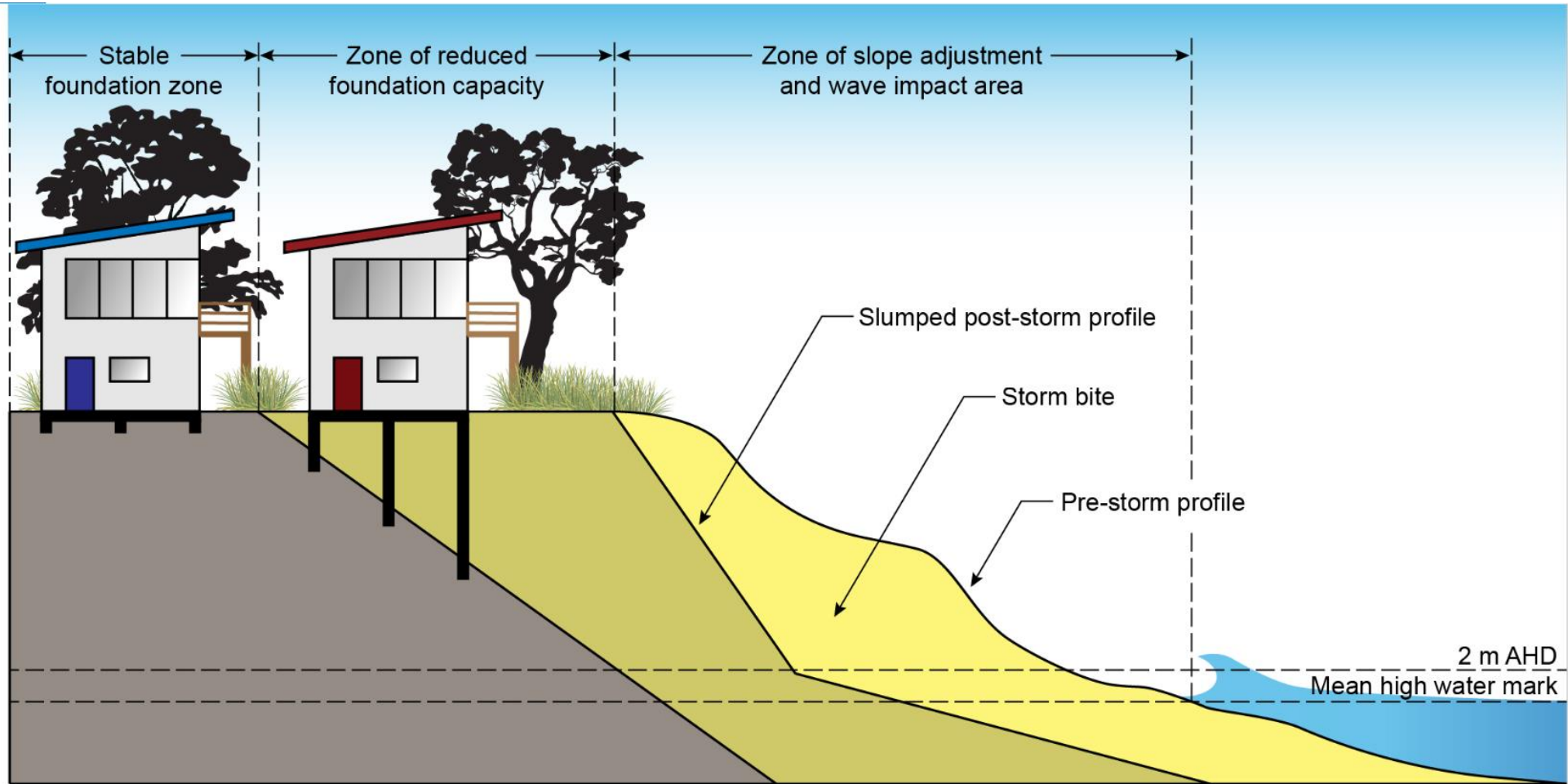


Source: Stephens et al., (1981)

BMT WBM (2013)



Coastal erosion/recession hazard lines

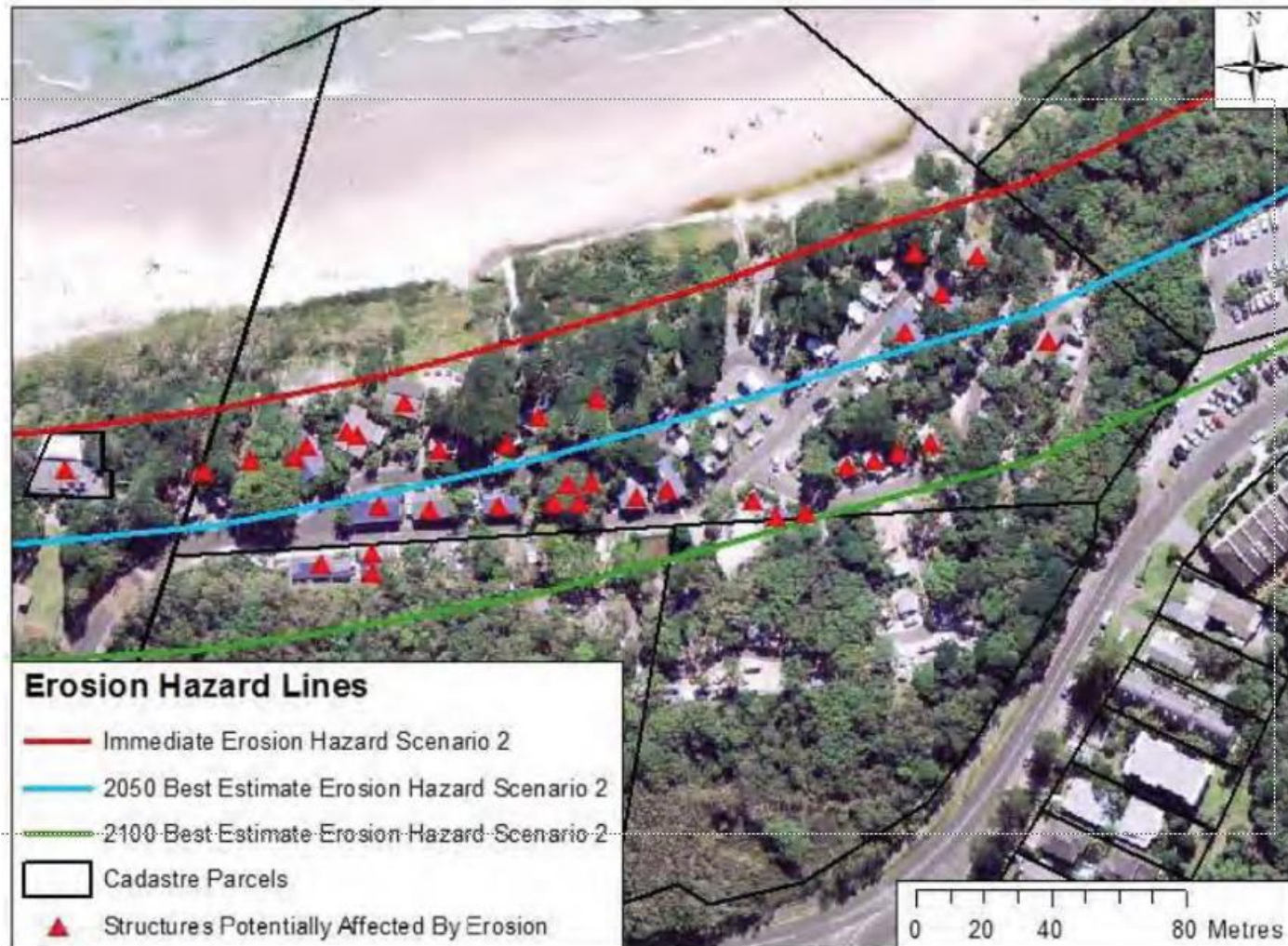


BMT WBM 2013 Hazard study, based on 2007 beach state

August 2020:

Coastal Engineer,
Structural Engineer
Geotechnical Engineer

determined that the café was
at imminent risk of collapsing onto the beach



Front page news: Wamberal 1978

HIGHEST DAILY SALE IN N.S.W. (ABC ALDER)

The Daily Telegraph

Phone 20924 SYDNEY, WEDNESDAY, JUNE 21, 1978 Price 15c

FOOD STOCKS DWINDLE: p3

Home slides to its doom

A second house crashed into the sea at Terrigal last night.

The second house starts to slide last night as the earth below it gives way.

Huge seas had cut away tonnes of sand from its foundation.

It fell at 10.10 pm — just over an hour after the king tide reached its peak.

Earlier yesterday another house in the same street, Ocean View Drive, had slipped in.

The second house is an island, surrounded with the front section overhanging a 10-metre drop for several hours.

It shattered as it hit the beach and most of the rubble was swept away by the big sea.

State Emergency Service officers had cut a steel slatiron which had anchored the 400,000 house to a brick patio at the rear.

New crisis

A brick laundry and verandah were left standing.

The house was owned by Mrs. Lenka Roper, 58, a widow, who was staying with her son in Sydney last night.

The SES experts another crisis when the tide peaks again this morning.

A third house threatened by the surge yesterday was backed up and moved back about four metres.

Last night Mr. Le. Saunders, 47, and his wife

... the wreckage. — Photos by Ian Mainbridge.

The house poised above the cliff yesterday...

Continued P2

CITY: Clearing, Top Temp: City, Liverpool 17 (Delft, map P14), TV P16 Letteries: Jackpot 1328 P35

Classifieds P24.



Figure 1 Erosion at Terrigal Beach 20th June 1978. House collapses on the high tide at 8.00 a.m. The House to the left collapsed on the subsequent high tide at 10.10 p.m. (photo courtesy of News Limited).

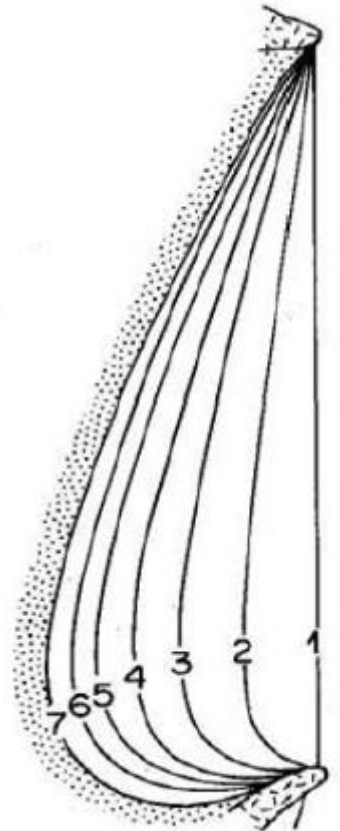
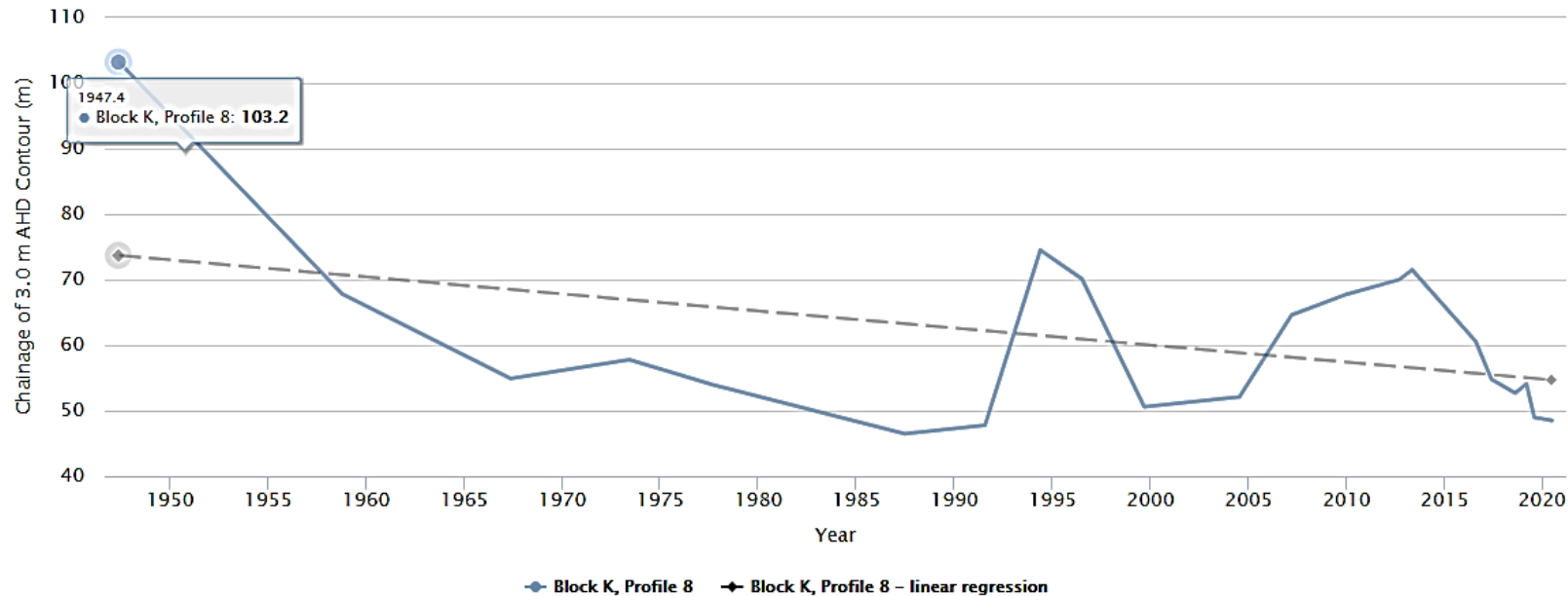
Sand volume change from recession since 2007 baseline

13 years have elapsed since the 2007 baseline of the BMT WBM (2013) hazard study

We are 30% of the way between 2007 (“present”) and 2050

Ongoing recession and sea level rise recession components:

- Underlying recession (0.2 m/year): $13 \times 0.2 \text{ m/year} = 2.6 \text{ m}$
- Sea level rise (3 mm/year) recession: $13 \times 0.003 \text{ m/year} \times 88 = 3.4 \text{ m}$
- **Total additional recession: $= 6.0 \text{ m}$**

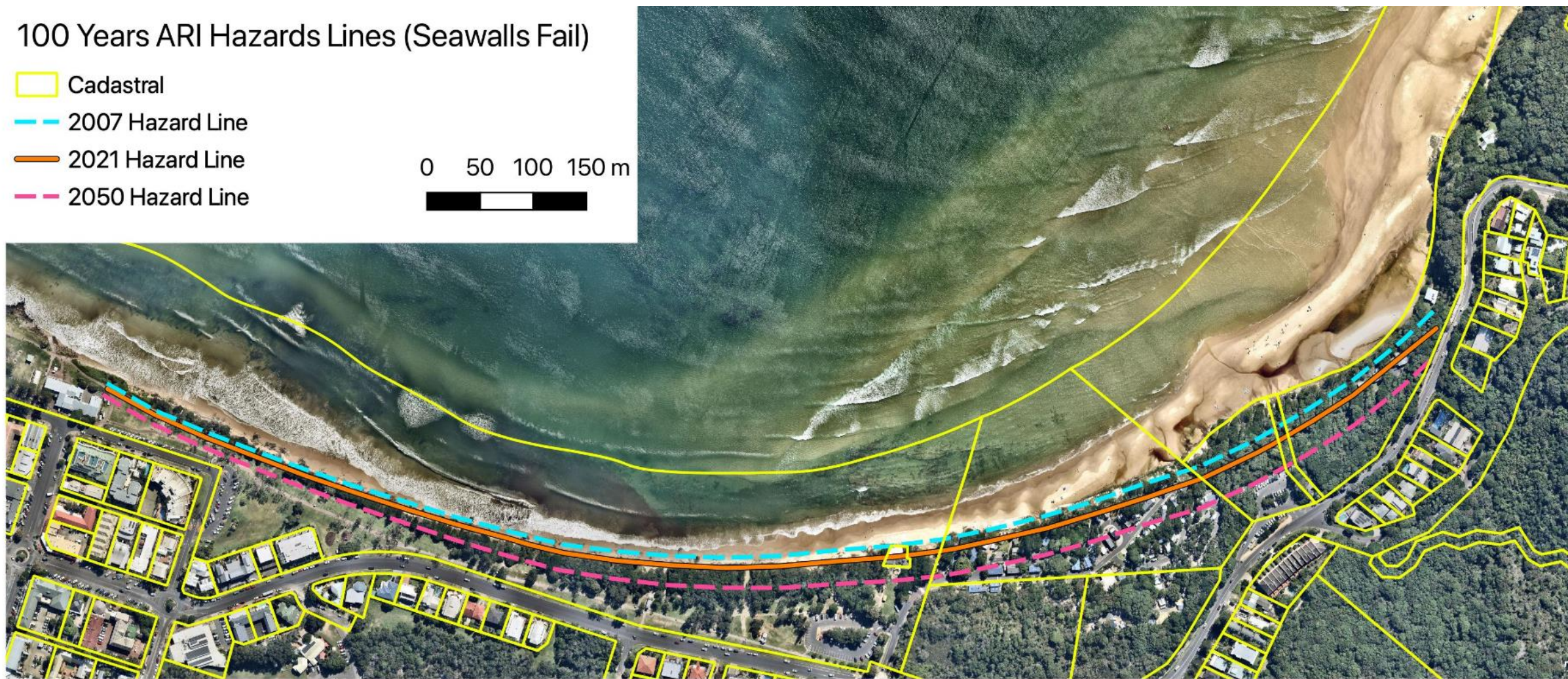


WRL modification to hazard line for 2021

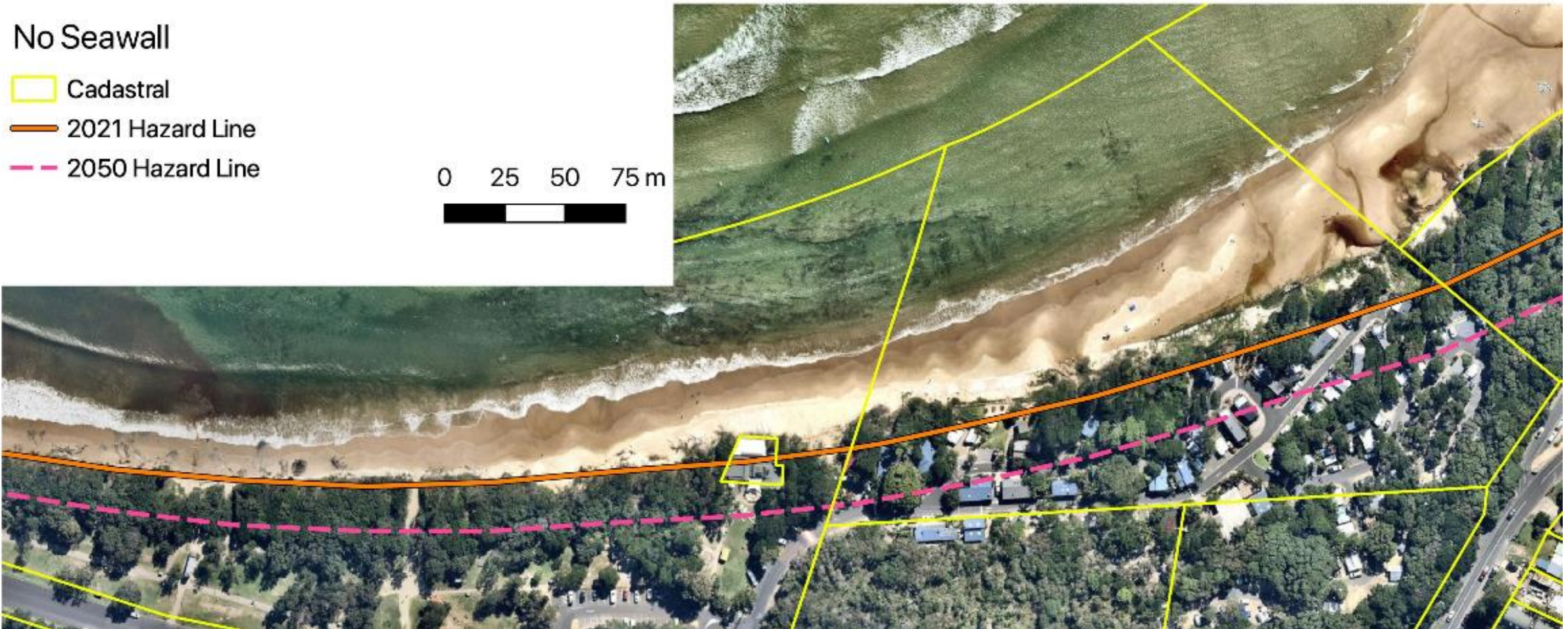
100 Years ARI Hazards Lines (Seawalls Fail)

- ▭ Cadastral
- - - 2007 Hazard Line
- 2021 Hazard Line
- - - 2050 Hazard Line

0 50 100 150 m



WRL modification to hazard line for 2021

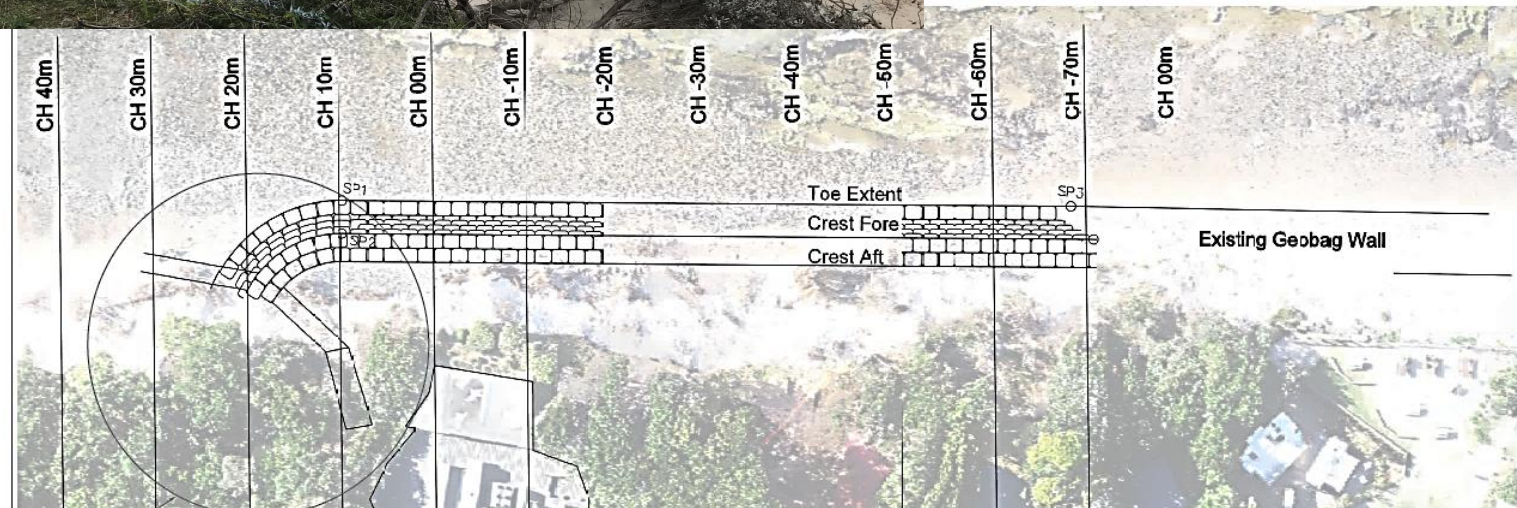
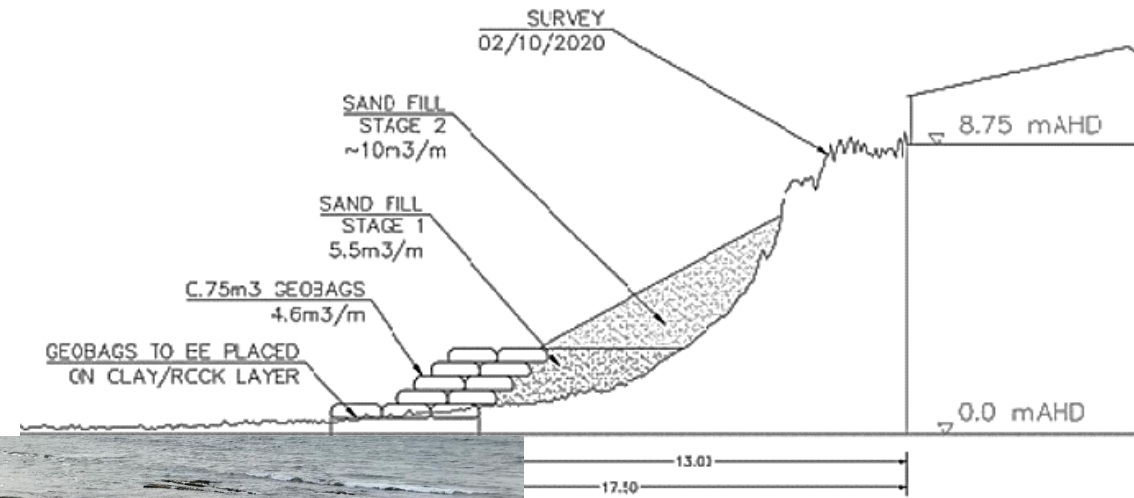


Geobag design – 5 year life

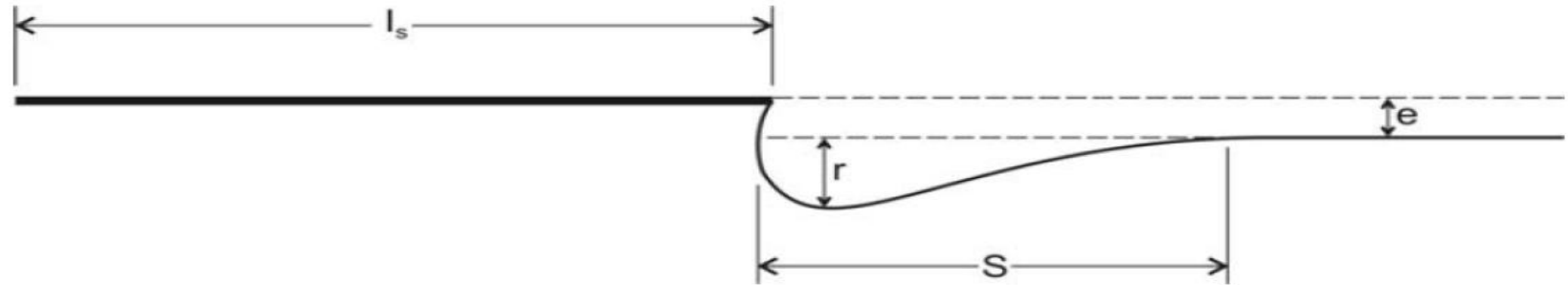
Cross shore position
with sand nourishment
based on requirement
for geotechnical slope stability

Collaboration between:
Coastal Engineer
Structural Engineer
Geotechnical Engineer

Constructed November 2020
One extra course added December 2020

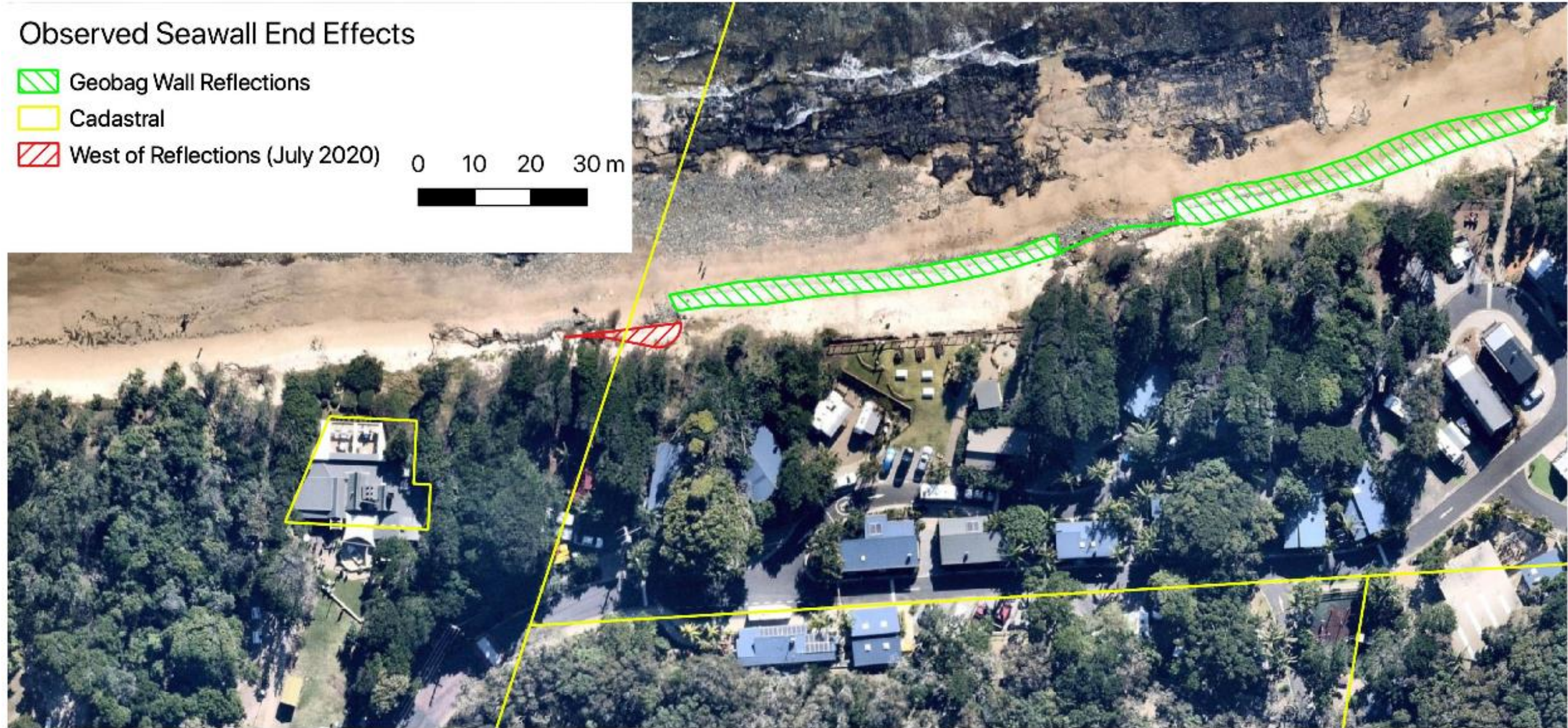
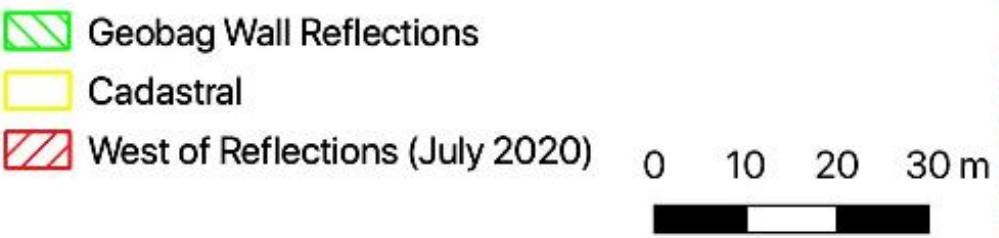


Seawall end effects

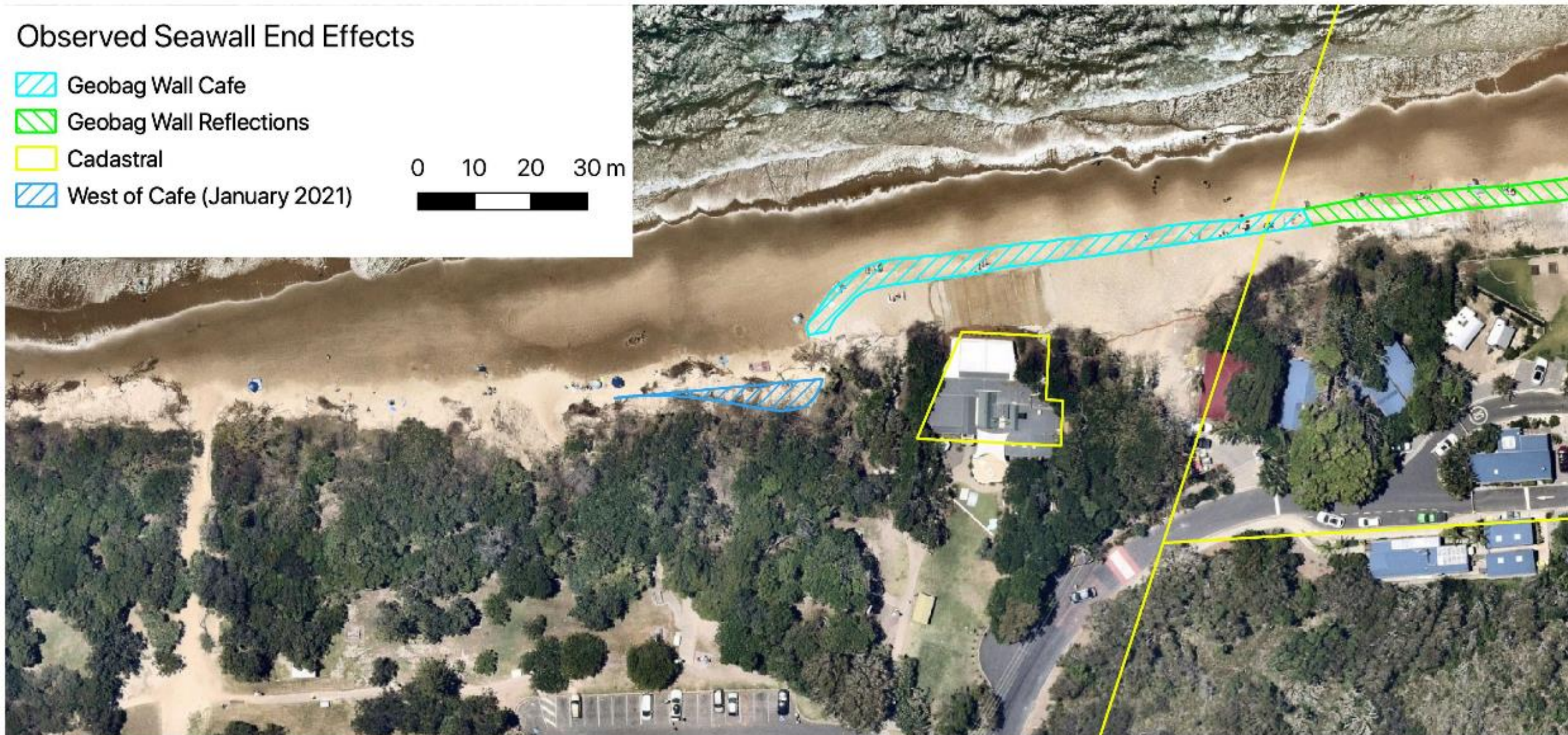


Observed end effect - Reflections

Observed Seawall End Effects



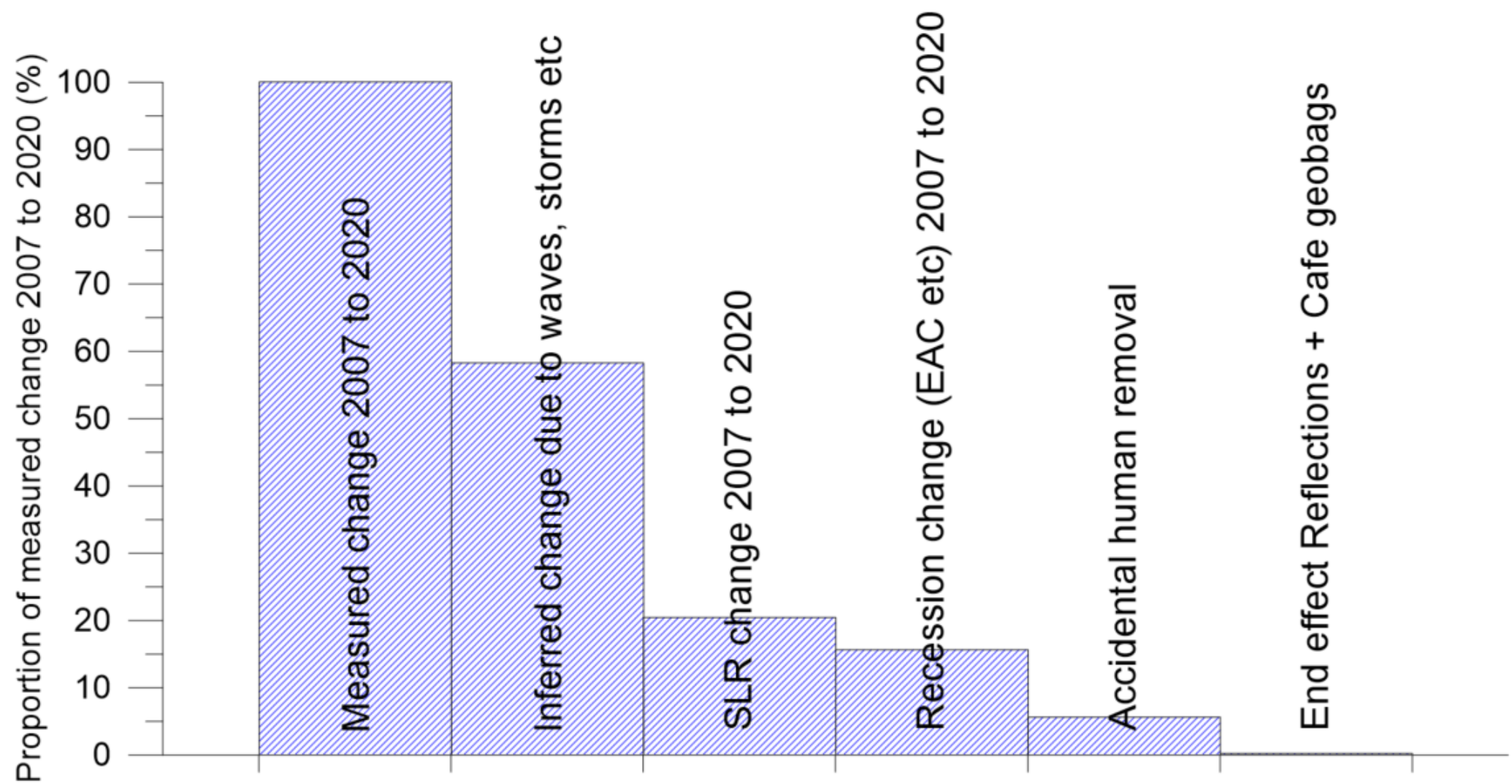
Observed end effect – Reflections + Café



Causes of change 2007 to 2021

- Recent large storm wave events in 2020 from the east to north-east, such as TC Uesi
- Littoral drift transport away from Cape Byron in both directions, southward to Tallow Beach and NW into Byron Bay
- Reduction in sand close to Cape Byron for headland bypassing (Gordon, 2011)
- Sand slug has filled Wategos, The Pass, part of Clarkes Beach, but not Main Beach
- East Australian Current losses of 50,000 m³/year to the south of Cape Byron
- Accidental/incidental human removal (2 million beach visits per year)
- Sea level rise, sea level rise recession and ongoing underlying recession

Contributions to change 2007-2021: 180,000 m3 of erosion above AHD



Monitoring and maintenance

- An initial UAV LIDAR/optical land survey undertaken at low tide
- A weekly photo from reference point e.g from the CoastSnap station
- If geobags are buried, no additional monitoring is required for that week
- If geobags are exposed, or the BoM issues warnings, additional daily photos should be taken
- If the photos reveal substantially exposed or displaced geobags, the works should be inspected as soon as practicable by a coastal engineer or competent person
- A geotechnical/structural engineer should be consulted if sand slope behind geobags is eroded
- Movement of multiple geobags, loss of crest bags or loss of the sand slope needs to be rectified as soon as practicable



Mitigation of impacts

- Regular inspection of the beach and dune, removal of vegetation at risk of imminent collapse, grading of the erosion scarp to a maximum gradient of 1V:1.5K (34°)
- Establishment of a rolling easement of vegetation, through additional planting to replace losses
- Preservation of beach access through the importation and/or grading of sand, or other measures



4. Development Application Considerations

DA Pre-consultation – Clarkes Beach

Robyn Campbell
Senior Environmental Engineer
Hydrosphere Consulting



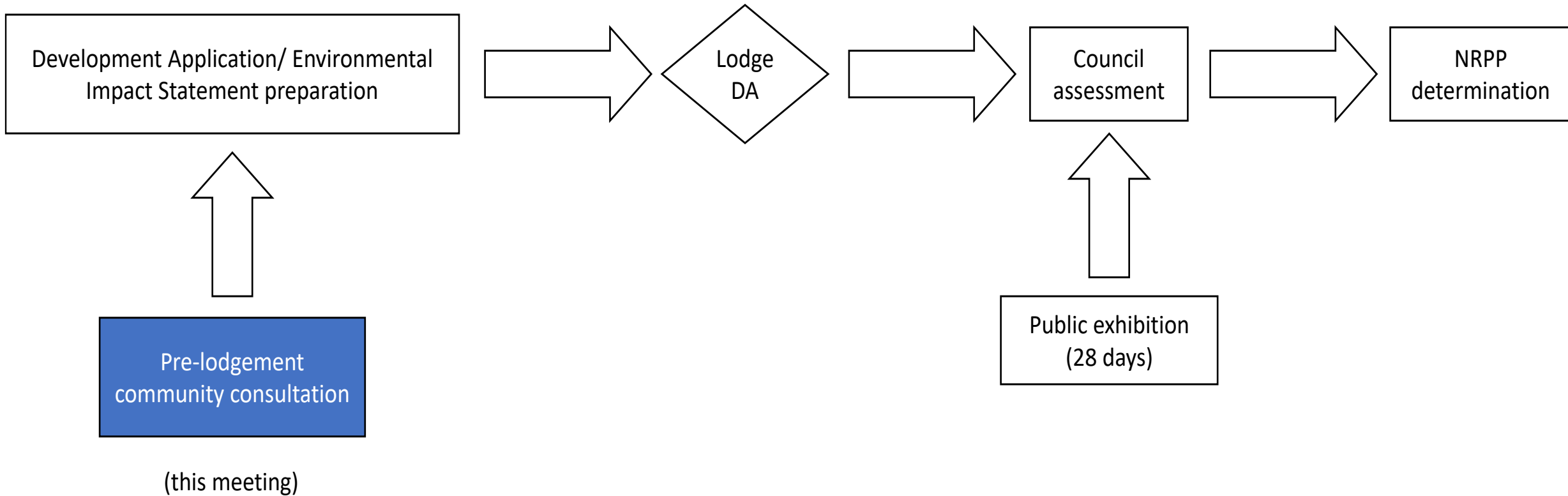
Planning Pathway

- Part 4 : Temporary coastal protection works:
 - Coastal Management SEPP – development consent required (no CMP, sandbags >90 days) and designated development (mapped as littoral rainforest)
 - SEPP (State and Regional Development) – regionally significant development (coastal protection works carried out by a public authority that require development consent)
 - DA will be assessed by Byron Shire Council and determined by Northern Regional Planning Panel
 - Council to place DA on public exhibition - 28 days

Work in Progress

- Aboriginal Cultural Heritage Assessment
- Biodiversity Assessment
- Environmental Impact Statement
- Consultation – Government agencies, Council, community groups, surrounding landowners
- Coastal Hazard Assessment

To summarise...



5. Q & A Session

DA Pre-consultation – Clarkes Beach

This presentation will be at available:-
dpie.nsw.gov.au/clarkesbeach



Thank you!

You can submit your feedback on the proposed development up until 16 July 2021 to robyn@hydrosphere.com.au



APPENDIX 5 COMMUNITY FEEDBACK

Written feedback provided prior to and after the community meeting is attached in this Appendix. Emails requesting a link to the meeting (with no other comment) have not been included here. Names and contact details have been redacted for privacy reasons.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

re Clarkes Beach Consultation



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Fri 25/06/2021 11:01 AM

Dear Robyn

I would like to participate in the online consultation re Clarkes Beach - I am in support and I am available for the online meeting 10-11am on Friday 9 July ...
best wishes

Registering for Community meeting on Clarkes Beach, Byron BAY



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sat 26/06/2021 1:08 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Registering for Community meeting on Clarkes Beach, Byron BAY



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sat 26/06/2021 1:15 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Sent from my iPhone

Registering for Community meeting on Clarkes Beach, Byron BAY



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sat 26/06/2021 3:51 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Coastal protection Works Clarkes Beach on-line session Friday 9th July



[Reply](#) [Reply All](#) [Forward](#) [...](#)

Sat 26/06/2021 5:18 PM

Dear Robyn,

I would like to register for the on-line session please.

I certainly have no objections to the emergency protection works that have been undertaken to help protect the two commercial properties controlled by Crown Land.

But their protection is only a fraction of what is required to protect the length from the NPWS house near Captain Cook carpark all the way along the beach to the rock wall protecting the Surf Club.

I am aware that the Department had been instructed by Council to remove the bags placed in front of the caravan park last year, but I can only assume common sense prevailed and they were left in place.

I also assume you have the NSW Public Works Report dated, I believe, 1976, in regard to the predicted recession lines along this length of the Bay and the decision by the then Council to let nature takes its course without human intervention.

That decision may have appeared reasonable at that time some 45 years ago but when the reality of a receding coastline happens, the community and all levels of Govt need to resolve when and if they want to preserve not only the Bay but many assets immediately behind it, for future generations.

Your proposal wants to leave works in place for at least 5 years while solutions are developed.

At the moment, the real threat is to the unprotected dunes between your Cafe and the surf club and the next storm may well see one section lose all of the remaining trees on the top of the dune, driving home to everybody just how bad this problem is- if no work is done for up to 5 yeras you can be assured the majority of trees along that length could go.

If you want the community to back your desire to protect your two commercial properties for 5 years while the rest of the bay is washed away before our eyes, you may have some challenges ahead.

If State and Local Govt and all affected commercial operators undertake urgent works asap to minimise any further loss along the whole affected length, I suspect the community will support your desire to look after your two commercial properties as a part of the overall required solution.

I would suggest Crown Lands facilitates a whole of Government response as a matter of urgency and does not just worry about its two commercial properties and hope others look after the rest- if one goes, they all go, so please start talking about the whole length and what and when the community will see protection in place in the short term and then the long term.

Don't hide behind the claim that you are only responsible for your bit- start responding like Govt responded to the bush fires in the North Coast and operate from a whole of Government perspective- what is happening at Byron will have a potentially greater financial and social consequence than even those fires.

Yours sincerely,

Registering for Community meeting on Clarkes Beach, Byron BAY



[Reply](#) [Reply All](#) [Forward](#) [...](#)

Mon 28/06/2021 9:56 AM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Registering for Community meeting on Clarkes Beach, Byron Bay



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Mon 28/06/2021 12:07 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Coastal protection works Clarkes Beach, Byron Bay -online session



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Mon 28/06/2021 2:00 PM

Hello Robyn,

My website bigfinsurf.com has a number of Clarke's Beach erosion photographs that may be of interest. Please register me for the online session.

Thank you

Registering for Community meeting on Clarkes Beach, Byron Bay



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Tue 29/06/2021 8:30 AM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Many thanks

Registering for Community meeting on Clarkes Beach, Byron Bay



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sat 3/07/2021 10:48 AM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Registering for Community meeting on Clarkes Beach, Byron Bay



[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sat 3/07/2021 2:50 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.


I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

sandbag DA info session 9 July

[Redacted]

 We removed extra line breaks from this message.

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sun 4/07/2021 11:55 AM

G'day Robyn

I understand from an advert in The Echo of 23 June that DPIE is planning to submit a development application to Byron Shire Council to retain the sandbags and dune revegetation work for an estimated 5 years. They wish to buy time for a precinct plan to be implemented to manage coastal erosion at Clarkes Beach, in collaboration with stakeholders including the adjoining Reflections Holiday Park and Byron Shire Council.

I see you are on the project team which will hold an online session to provide information and obtain feedback from the community on:
Friday 9 July 2021, 10 am to 11 am.

Could you please make room for me to join that meeting?

And could you please let me know I've reached you?

Thanks and Cheers,

[Redacted]

Registering for Community meeting on Clarkes Beach, Byron BAY

[Redacted]

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Mon 5/07/2021 12:14 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Many thanks,

Byron beach issues

[Redacted]

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Mon 5/07/2021 1:17 PM

Hi,

I'm interested in the community discussion about what can, if anything, be done to protect the bay beach.

Thanks

Registering for Community meeting on Clarkes Beach, Byron BAY

[Redacted]

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Tue 6/07/2021 12:12 PM



Hi Robyn,

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I also request that more consultation with community is undertaken.

It is essential that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Registering for Community meeting on Clarkes Beach, Byron BAY

[Redacted]

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Tue 6/07/2021 7:53 PM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Coastal ProtectionWorks at Clarkes Beach Byron Bay Submission

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Wed 7/07/2021 4:51 PM

Hi,

I support the proposed works and support retaining the existing sand bags along Clarkes Beach. I would like sandbags placed along Clarkes Beach from in front of the existing NPWS holiday dwellings along Clarkes beach and along Main Beach past the surf club to the small rockwall in front of the pool.

I have been a local resident for 30 years and I have also been a real estate valuer in the Byron area for 30 years. It has been very sad to witness the extent of the beach erosion along Clarkes Beach and Main Beach. Sand bags should have been installed along the beach earlier. One of the best beaches in Australia has been partially destroyed and the character and uniqueness of the beach has been very negatively impacted and this could have been prevented. Action should have been taken earlier, but retaining the existing sand bags and additional sandbagging will be of some assistance to prevent a worsening of the situation.

Regards,

Registering for Community meeting on Clarkes Beach, Byron Bay

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Fri 9/07/2021 9:59 AM

I wish to attend the online session on Friday 9 July 2021, from 10 am to 11 am.

I request that more consultation with community is undertaken and that public meetings be held as an hour-long, online meeting is not nearly enough for a topic of such fundamental importance to Byron Bay as Clarkes Beach.

Thank you,

Re: Coastal protection Works Clarkes Beach on-line session Friday 9th July

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Fri 9/07/2021 2:51 PM

Hi Robyn.

I would like to congratulate all involved on the very professional presentations and approach taken today-well done.

The challenge as always at Byron is to overcome the opponents in the community and, as I am sure you know, in Byron there are always objectors.

But what you want to achieve is well thought out, well presented, and certainly has my full support and I will argue that within the community contacts I know.

Best of luck Robyn.

Sincere regards,

Re: re Clarks Beach Consultation

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Tue 13/07/2021 10:15 AM

Dear Robyn

Thank you very much for the opportunity to comment - unfortunately I was working and unable to attend the zoom session. I VOTE YES to continue with sandbagging in front of Reflections and in front of the Beach Restaurant.

I would also like to see sandbagging continue all along the beach anywhere it is needed to stop the beach eroding.

I would also like to see beach nourishment taking place to replace the sand that has been eroded away.

I have been a resident of Byron Bay for most of the last 30 years since I arrived in Byron in 1992. Over a period of several months I have been concerned about this issue and I have been consulting with a variety of organizations and individuals including a local surf business, Byron chamber of commerce, local residents, Council staff, restaurant owners etc

There is a massive concern from Byron Bay residents that the beach needs a coastal management plan and in the meantime - emergency measures need to be undertaken to protect the dunes and the town. This is urgent !

I have read several reports and I am aware that neighboring Councils such as Ballina, Tweed and Gold Coast Councils undertake beach nourishment and other measures to ensure the protection of their beaches. Please ensure that our previous Byron Bay beaches also receive the same level of support and coastal management care as nearby Councils.

Thank you for your kind consideration.
best wishes

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Good morning Greg and Catherine

Just wanted to drop you a line and thank you for this morning's community consultation session on Clarkes Beach.

Great presentation by all and good to see support.

As you said Greg, the community asked some thoughtful questions.

Hope you are both safe and well with all the COVID restrictions. Look forward to keeping in touch and talking again soon.

Kind regards

Clarkes Beach DA submission

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Fri 16/07/2021 9:17 AM

G'day Robyn

My understanding is that current activity on this matter is "pre-lodgement", ie scoping for a DA (or DA's) that will be lodged. I understand also that submissions close today. I lodge the following points:

1. The session on 9 July indicated that the proposal is "designated development" and therefore the DA must include an Environmental Impact Statement (EIS). I support there being an EIS especially because (i) it must thus consider alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years, and because (ii) it must go on Public Exhibition.

2. I detest the impact of the lodgement itself, which is that the matter of the bags already being there beyond their 3-month "emergency" life is unlikely to be pursued.

3. the key alternative to the 5-year extension is to remove the bags immediately. One benefit of that is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced around the bags themselves, thus reducing erosion especially in storm events over the next five years.

This alternative is preferable under all circumstances.

The benefit of keeping the bags appears to be administrative, in that several years are needed to determine the future of the Cafe building, and maybe of Reflections caravan park structures.

A key question is therefore, why not remove the Cafe and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?

The structures should "retreat" now to a safe place.

Questions of how to configure that place can be answered after removal.

Even if sand accretes over the next five years, further fluctuations are likely in the long term. Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. Predictions confirm both those effects.

4. it appears the need for bags at the Cafe was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Is the question of the future of this line of bags being dealt with in unison, or separately? If the latter, why and how can that be sensible?

In conclusion I oppose the DA process and suggest the sandbags be removed immediately, an undertaking that the Crown agreed to when it was granted permission for their emergency (3-month) placement.

Submission - Pre-lodgement community engagement : coastal protection works at Clarkes Beach

Thank you for the opportunity to comment, I appreciate that the Government has sought community comment prior to lodging a development application.

I oppose the proposal to progress the protection works at Clarkes Beach. The works that have previously been constructed were undertaken as emergency works for 3 months as per the Coastal Protection Act 2016. They should be removed to avoid further impact on the internationally iconic Byron Bay beach and allow natural processes in this dynamic and iconic environment.

I strongly suggest that the Government review it's responsibility to the people of NSW to recognise the dynamic nature of our coastline, Climate Change and the known coastal erosion threats.

Byron Shire has a history of coastal erosion. In 1978 after a twenty year period of storms and cyclones on the far north coast, the state government's Public Works Department produced a detailed report titled "Byron Bay - Hastings Point Erosion Study" . This was a foundation document for the development and implementation of LEP clauses and DCP Part J, coastal erosion provisions in 1988, which identified the 7f(1) and (2) Coastal Erosion zones. It produced maps that indicated the risks associated with the immediate, 50 and 100 year erosion zones. The DCP detailed the requirements for structures in those zones to be temporary (demountable) in construction due to the foreseeable risk of coastal erosion. The principle of allowing natural processes is essential in the management of the coastline.

The Byron Shire has adhered to the provisions in the LEP and DCP and many private coastal landholders have been required to conform to those requirements.

It is unacceptable that the State should seek to override those provisions and historical approvals for their own interests. The Government should be a leader and recognise that historical events and the uncertain climate change future must be responsibly managed. What's at stake is the entire beach as there is no doubt that the continued presence of such works has an impact on the 'unprotected' adjacent areas of beach.

Recent works undertaken to stabilise and protect both the Reflections caravan park and the café indicate poor leadership on behalf of the government. Those works have already illustrated the undesirable impacts with the gouging and eroding adjacent areas with an end effect. In fact, it appears that the impacts of the protection of the Reflections park contributed to the adverse impacts on the café.

I was on council when the DA approval was given for the renovations to the café. The approval clearly identified that the front of the building was demountable and temporary, subject to erosion events. This is the position that was taken well over a decade ago and should be adhered to. It's unacceptable that any works should be taken to protect the area that has been recognised at risk for decades.

The Government should consider the action taken by BSC when it's own property, the First Sun Caravan Park was impacted by storms and the Jonson Street protection works. Council accepted the loss of the frontal area of the caravan park and in the process lost significant financial return due to the recognition of the erosion and accepted adherence to the planning processes.

The State should apply the same rules to itself. The Reflections park and the café are Crown Land and should not be protected as doing so puts at risk the viability of the whole embayment. The park and the café are sited in an area that has long been identified as being at risk and there has been sufficient time to plan for the reality that currently exists. The State Government should've shown the leadership expected and planned for this foreseeable risk and sought to redesign the park with a reduced beachfront and provided for the redesign of the café and at least the removal of the front dining area of the café, as per the DA.

Like many others I have watched the coastline vary over the last 3 decades. The erosion is followed by accretion. Please review the substantial historical information including the Scoping Study on the Feasibility to Access the Cape Byron Sand Lobe for Sand Extraction for Beach Nourishment by Paterson Britton and Partners 2006. It clearly identifies the risks and impacts of attempting to protect these fragile areas and the difficulties associated with sand nourishment which would be required if such works were contemplated.

If the State does not recognise its responsibility and leadership role in this crucial matter and proceeds with the proposal for installation of new works for 5 years, then an EIS is required that considers the whole beach and all works in one process. The two areas are part of a whole coastal system and assessment should not be undertaken in isolation. There are already impacts associated with the ad hoc and piecemeal approach that has been taken.

Council is in the process of developing a Coastal Management Plan and no work should proceed until that process is completed. The removal of existing works is the only reasonable option at this time.

I request that the State Government not proceed with the DA for a 5 year protection works strategy and instead remove the recently placed sand bags and accept the losses. If not there are greater risks for the entire beach and the physical, aesthetic and reputational damage to this iconic destination.

Yours sincerely

Submission on Clarkes Beach sandbagging DA

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)

Sun 18/07/2021 10:16 PM

Hello,

Here is my submission on the proposal for a DA to enable the sandbags at Clarkes Beach to stay in place for 5 years. Key concerns/points for the proposed DA:

- Byron has long had a policy of 'planned retreat' – structures should "retreat" now to a safe place. This should not take 5 years to achieve.
- A Development Application designed to support buildings with sandbags is a bad signal to send to the community. It creates an expectation that buildings that are threatened by erosion can expect similar treatment and the community, supported by the NSW government and legal precedent, does not wish to encourage this.
- Structures that are on the dunes cannot be the reason that sandbagging gets supported for long periods. Dunes need to be able to self restore – and they will if natural processes can occur.
- The bags are already there beyond their 3-month "emergency" life and a DA to keep them there is not what Byron wants; they are only supporting structures on the dunes. If there were no buildings or other structures, then this DA would not be necessary.
- Crown Lands agreed to placing the bags as an emergency measure to be removed after 3 months. Their removal should be the priority, not the prolongation of the bag wall.
- The benefit of removing the bags immediately is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced at the bags themselves, and erosion with it.
- Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. All modelling predictions confirm both those effects.
- At the same time, sand is beginning to come around Cape Byron and into the Bay but it is not adhering to the dunes and it appears that the high escarpment and the bags are part of the reason for the lack of accretion.
- Byron is in the midst of developing a Coastal Management Plan and this project could potentially conflict with or hold up that process.
- If there has to be a DA, an Environmental Impact Statement must be undertaken – an EIS could examine alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years.
- The EIS must go on Public Exhibition.
- The benefit of keeping the bags appears to be administrative, in that years are needed to decide the future of the Café building, and maybe of Reflections caravan park structures. A key question is therefore, why not remove the Café and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?
- It appears the need for bags at the Café was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Information we have received is that there will be two DAs, one for each line of bags. Given that it is all Crown land and the bags, should the two lots of bags not be dealt with as one DA, because each impacts the other?

Thank you for the opportunity to comment.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Clarkes Beach DA for sandbags

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)
Sun 18/07/2021 9:52 PM

Hi,

I strongly oppose any sandbagging on Byron's beaches. It is science that tells us as soon as rocks, sandbags or any walls are put next to where the waves terminate, that the water will undermine the obstruction and remove the sand. The sand will move elsewhere and change the shape of the beach.

It is imperative that Byron Shire has a Coastal Management Plan to ensure the beaches are sacrosanct: seeing as that's why tourists come here anyway.

Major decisions have to be made. Moving buildings, car parks and grassy parks further from the beach will allow, over time, the beaches and sand to return.

After the three month sandbagging in front of the cafe at Clarkes expired, a decision needed to be made to move the cafe or buy the cafe and demolish, compensating the owners. This is nothing more than shortsighted postponement of proper management and effective action to deal with the solution of eroding beaches.

A five year sandbagging exercise is absolutely against all scientific knowledge and must not be permitted.

Only years ago, there was over 100 metres of beach sand in front of the Byron surf club. After the rock wall was built, it eroded until there is now no beach.

Byron Bay Sandbagging Mainbeach to save Cafe and Reflections Caravan Park.

[↩ Reply](#) [↩ Reply All](#) [→ Forward](#) [...](#)
Sun 18/07/2021 8:57 AM

Dear Robyn,

We express our deep concern re the above proposal on Crown Land for the following reasons.

1. For decades it has been common knowledge that the coastal beaches are eroding. More so since Climate Change Science has revealed the intensity of same. It has been common knowledge that 'planned retreat' is a temporary remedy. Much debate has surrounded this remedy as many houses on the sea front DO NOT HAVE SPACE for same. If this should occur the time of 5 years is inappropriate. Indeed, greater scientific research of Coastal natural systems should dominate the debate.
2. Sand bagging a structure is like 'putting a Band Aid on a Shark bite'. Rigorous action must be addressed to end this practice and structures must adhere to Risk and legal practices surrounding same.
3. Dunes must be protected and cleared of structure to allow natural systems to operate.
4. The existing Sand Bags are not DA appropriate.
5. Bags on Crown Land should be removed after 3 months.
6. So much damage is occurring to the Coast ...remedy must be IMMEDIATELY ADDRESSED by removal of bags ..thus addressing down stream erosion...known as 'end effect'.
7. Greater RESEARCH INTO CLIMATE CHANGE MODELLING MUST BE ADDRESSED. THE COAST IS MOVING INLAND as Climate Change hastens currents and natural systems.
8. Imperative that separate D.A's be submitted addressing the above proposal ..these must be accompanied by Environmental Impact Statements. These must be made Public and full consideration given to PUBLIC INTEREST AND RATE PAYERS FUNDS.

Finally, the whole coast has changed over thirty three years. New Developers and Council give priority to Profit over Ecological Sensibility.

It can be seen that Anthropocene 'rewards' will result in Byron becoming a land locked Tourist Destination as "market forces" dominate in inevitable demise of a once beautiful place.

Thanking you,

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Submission on Clarkes Beach sandbagging DA

[← Reply](#) [↶ Reply All](#) [→ Forward](#) [...](#)

Sun 18/07/2021 8:40 AM

Hello,

Here is my submission on the proposal for a DA to enable the sandbags at Clarkes Beach to stay in place for 5 years. Key concerns/points for the proposed DA:

- Byron has long had a policy of 'planned retreat' – structures should "retreat" now to a safe place. This should not take 5 years to achieve.
- A Development Application designed to support buildings with sandbags is a bad signal to send to the community. It creates an expectation that buildings that are threatened by erosion can expect similar treatment and the community, supported by the NSW government and legal precedent, does not wish to encourage this.
- Structures that are on the dunes cannot be the reason that sandbagging gets supported for long periods. Dunes need to be able to self restore -- and they will if natural processes can occur.
- The bags are already there beyond their 3-month "emergency" life and a DA to keep them there is not what Byron wants; they are only supporting structures on the dunes. If there were no buildings or other structures, then this DA would not be necessary.
- Crown Lands agreed to placing the bags as an emergency measure to be removed after 3 months. Their removal should be the priority, not the prolongation of the bag wall.
- The benefit of removing the bags immediately is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced at the bags themselves, and erosion with it.
- Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. All modelling predictions confirm both those effects.
- At the same time, sand is beginning to come around Cape Byron and into the Bay but it is not adhering to the dunes and it appears that the high escarpment and the bags are part of the reason for the lack of accretion.
- Byron is in the midst of developing a Coastal Management Plan and this project could potentially conflict with or hold up that process.
- If there has to be a DA, an Environmental Impact Statement must be undertaken – an EIS could examine alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years.
- The EIS must go on Public Exhibition.
- The benefit of keeping the bags appears to be administrative, in that years are needed to decide the future of the Cafe building, and maybe of Reflections caravan park structures. A key question is therefore, why not remove the Cafe and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?
- It appears the need for bags at the Cafe was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Information we have received is that there will be two DAs, one for each line of bags. Given that it is all Crown land and the bags, should the two lots of bags not be dealt with as one DA, because each impacts the other?

Thank you for the opportunity to comment.

Submission on Clarkes Beach sandbagging DA

[← Reply](#) [↶ Reply All](#) [→ Forward](#) [...](#)

Sat 17/07/2021 6:30 PM

Hello,

Here is my submission on the proposal for a DA to enable the sandbags at Clarkes Beach to stay in place for 5 years. Key concerns/points for the proposed DA:

Before any further action, we MUST have an EIS, and expert advice provided to council.

- Byron has long had a policy of 'planned retreat' – structures should "retreat" now to a safe place. This should not take 5 years to achieve.
- A Development Application designed to support buildings with sandbags is a bad signal to send to the community. It creates an expectation that buildings that are threatened by erosion can expect similar treatment and the community, supported by the NSW government and legal precedent, does not wish to encourage this.
- Structures that are on the dunes cannot be the reason that sandbagging gets supported for long periods. Dunes need to be able to self restore -- and they will if natural processes can occur.
- The bags are already there beyond their 3-month "emergency" life and a DA to keep them there is not what Byron wants; they are only supporting structures on the dunes. If there were no buildings or other structures, then this DA would not be necessary.
- Crown Lands agreed to placing the bags as an emergency measure to be removed after 3 months. Their removal should be the priority, not the prolongation of the bag wall.
- The benefit of removing the bags immediately is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced at the bags themselves, and erosion with it.
- Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. All modelling predictions confirm both those effects.
- At the same time, sand is beginning to come around Cape Byron and into the Bay but it is not adhering to the dunes and it appears that the high escarpment and the bags are part of the reason for the lack of accretion.
- Byron is in the midst of developing a Coastal Management Plan and this project could potentially conflict with or hold up that process.
- If there has to be a DA, an Environmental Impact Statement must be undertaken – an EIS could examine alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years.
- The EIS must go on Public Exhibition.
- The benefit of keeping the bags appears to be administrative, in that years are needed to decide the future of the Cafe building, and maybe of Reflections caravan park structures. A key question is therefore, why not remove the Cafe and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?
- It appears the need for bags at the Cafe was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Information we have received is that there will be two DAs, one for each line of bags. Given that it is all Crown land and the bags, should the two lots of bags not be dealt with as one DA, because each impacts the other?

Thank you for the opportunity to comment.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Crown Lands discussion about its sandbag action at Clarke's Beach

[Reply](#) [Reply All](#) [Forward](#) [...](#)

Sat 17/07/2021 6:16 PM

Crown Lands has placed sandbags in order to protect its tenant - Beach Byron Cafe. It was done as an emergency measure for 3 months and the bags have already been in place for longer than stated. There is no justification for keeping them there longer to the detriment of the community's beach. The same goes for Reflections Holiday Park - they placed sandbags to protect the tourist park but in the process allowed damaging access to the beach by visitors in very doubtful circumstances. I witnessed many breaches of the poor protection offered by Reflections, particularly the pathetic plastic fence next to Byron Beach Cafe, that people staying at Reflections were simply jumping over, even jumping on it and pushing it to the ground.

Both lots of sandbags must be removed as soon as possible as they are causing erosion further along the public beach.

Sand is clearly coming around Cape Byron and into the Bay but it isn't adding to the dunes because of the sandbags.

The structures on the dunes, and inappropriate heavy vegetation, appear to be the main reason the dune system isn't functioning in the normal way. As high tides eat out sand below the top of the dune, the top should be able to fall off onto the remains of the dune below, and create a new gentle slope for replenishment by sand moving north later.

This is not able to occur because of the structures holding the top in place although badly eroded below and either side of the hard areas.

It is fairly clear the structures should be removed or rebuilt elsewhere, urgently before more damage is done to the dune and beach. Perhaps on the "sandhills estate" behind the row of tourist accommodation apartment buildings, as there is considerable Crown Land available. Completely removing the inappropriately built structures would allow the dune to be reshaped in an appropriate way that will support normal wave/sand/dune interaction each year.

Whatever is done must be in accord with, and support Byron's Coastal Management Plan, not set up more disasters outside of the proper management process.

Thank you for the opportunity to participate in the discussion. Unfortunately as the information part took up the whole hour publicised, I was not able to join the discussion or hear other views because I had a prior appointment at 11am. I would comment that the engineer's historic review took up way too much of the planned time.

SUBMISSION AGAINST EXTENDED TIME FOR SAND BAGGING ON CLARKE'S BEACH

Coastal hydrology at Sydney University in the early 1960s under Professor Dury alerted students to the how the coast was eroding landward and the reasons for it. Nothing has changed other than a blinded determination to use taxpayers' monies to withstand the natural forces of an open ocean and its eroding powers to protect properties.

I arrive in the Shire in 1986 and sought to purchase a dwelling. Real estate agents covering the coastal area of the Shire were forthright in advising me of Council's Planned Retreat Policy. Thus I made an informed decision when I finally purchased a property away from the coastal impact. I would have expected similar from Crown Lands and private persons!

It has to be with a sense of disgust that I watch the politics of violation of that policy at government level by now intending to extend sand bagging at Clarke's Beach for 5 years as opposed to constructively supporting the removal of any structures to an area away from identified planned retreat zones.

Worse, the message this is sending to the community within a coastal retreat zone is an expectation that public monies will be spent to protect property. The emergency 3 month period was, in the circumstances, damage control and definitely not something to be extended for 5 years. The dunal system should be denuded of structures, including those of Reflections Holiday Park and left to the natural process of the coastal hydrology.

It would also appear that action taken by Crown Land's Reflections Holiday Parks as well as Clarke's Beach Café has interfered with the longshore sand drift that would otherwise restore the frontal sand dune system. This type of behaviour would have failed Professor Dury's Coastal Morphology course in the 1960s as evidence of a complete lack of understanding of coastal forces. That course content became what is widely taught in high schools in Junior and Senior Geography Curriculums commencing in the late 1960s! Consequently, it would only be feigned stupidity for either Crown Lands or Clarke's Beach business concerns to cry, 'I did not know' The risk assessment of the location for each was high.

Two DAs are needed to cover both Reflections and Clarke's Beach Care with a requisite Environmental Impact Study.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

SUBMISSION Re Crown Lands DA to extend the life of the sandbags at Clarkes beach Byron Bay for another 5 years

Reply Reply All Forward ...

Sat 17/07/2021 4:41 PM

Storm cut erosion and recovery is probably the most widespread and impressive natural process operating on sandy beaches.

In just a few hours it can radically reshape beaches, lowering sand levels and seriously eroding dunes. The result is towering vertical cliffs of sand where a gently sloping vegetated dune previously existed. This can evoke strong emotions and commonly leads to demands to "do something". People fear that if it is not "stopped" the erosion will just keep coming. Such misunderstanding commonly leads to the placement of rocks and other seawalls, including sand bags. Unless the beach is losing more sand than it gains, the erosion is not permanent. Understanding this is critical.

To maintain a healthy beach which will make a quick recovery from storm cut erosion, we must -

1. Value the beach ecosystem.
2. Understand what is happening - that storm cut erosion and recovery is a natural cycle. It is not abnormal.
3. Maintain a sufficient width of dune between coastal development and the sea to absorb the dynamic shoreline fluctuations associated with storm cut and recovery.
4. Ensure the protective dune has a good cover of native sand trapping vegetation, particularly spinifex and pingao on the seaward dune face.
5. Do not build seawalls. The most significant cause of the complete disappearance of beaches has been and will continue to be seawalls. Seawalls built on eroding shorelines always destroy the beach. Choosing a seawall is a sad and retrogressive response to storm damage. Far from protecting they confront it. Seawalls protect houses, not nature.
6. "Soft solutions", (aka sand bags and beach replenishment) also harm the beach.
A wall of sand bags has a similar impact as a rock wall. Both confront the ocean and lead to scouring of sand in front and increased erosion at the 'wall end'. Beach replenishment kills the native ecosystem especially if different sized sand grains are introduced. Artificial beaches erode at twice as fast as natural beaches.

Considering then the most recent storm cut erosion impacting Main and Clarkes beach in Byron Bay, the response proposed by the DPIE goes against best practice and beach preservation. Temporary sand bagging to save the Beach Cafe and Clarkes Beach Caravan Park was understandable at the time of greatest storm impact.

But to maintain that bag wall for another 5 years is grossly irresponsible knowing what we know.

We know this proposed 'soft solution' in the corner of The Bay will increase erosion downstream between Clarkes and Main Beach ("end effect"). This is already visible in recent aerial photographs.

So why, given the bags simply move and increase erosion downstream, are the DPIE proposing to protect a relocatable Beach Cafe and a few caravan/cabin sites over beach recovery at this juncture? Why continue to prioritise buildings over natural beach recovery? Why push the problem further down the beach? Why hinder natural recovery? It just doesn't make sense.

Byron has long had a policy of 'planned retreat' – and these structures could now "retreat" behind the dune line (note point 3 above). This would be the responsible way to go and less costly in so many ways.



Our own storm cut erosion at Main beach

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation



The sand bag wall at the Beach Cafe



The hull outline is still visible on the seabed - 1986.

NSW Govt Photo.

The 'end effect' of a seawall (and groynes) Main Beach seawall 1986.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation



April 2021 Main Beach seawall



Recent 'end effect' erosion at Main Beach seawall.



Storm cut erosion west of Main Beach seawall

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation



The beach further west beyond the Belongil estuary. Same beach ostensibly, same weather, same tides, same huge seas. Very little storm cut erosion. Why? No rock seawalls or buildings. This is a natural beach and it handles inclement weather pretty well. In 2009 the sea did cut in to the high backing dunes. The berm in front of them with binding sea grasses has since grown and been little impacted by recent weather events. Why? Plenty of beach sand so the waves slow down as they approach the dunes.

I say NO to extending the life of the harmful sand bag wall at Clarkes Beach for another 5 years.

Temporary coastal protection works, Clarkes Beach - pre-lodgement community consultation

Submission on Clarkes Beach sandbagging DA

[← Reply](#) [↶ Reply All](#) [→ Forward](#) [...](#)

Sat 17/07/2021 6:28 AM

Hello,

Here is my submission on the proposal for a DA to enable the sandbags at Clarkes Beach to stay in place for 5 years. Key concerns/points for the proposed DA:

%20%20 Byron has long had a policy of %20planned retreat%20%20 structures should "retreat" now to a safe place. This should not take 5 years to achieve.
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%20%20 Structures that are on the dunes cannot be the reason that sandbagging gets supported for long periods. Dunes need to be able to self restore -- and they will if natural processes can occur.
%20%20 The bags are already there beyond their 3-month "emergency" life and a DA to keep them there is not what Byron wants; they are only supporting structures on the dunes. If there were no buildings or other structures, then this DA would not be necessary.
%20%20 Crown Lands agreed to placing the bags as an emergency measure to be removed after 3 months. Their removal should be the priority, not the prolongation of the bag wall.
%20%20 The benefit of removing the bags immediately is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced at the bags themselves, and erosion with it.
%20%20 Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. All modelling predictions confirm both those effects.
%20%20 At the same time, sand is beginning to come around Cape Byron and into the Bay but it is not adhering to the dunes and it appears that the high escarpment and the bags are part of the reason for the lack of accretion.
%20%20 Byron is in the midst of developing a Coastal Management Plan and this project could potentially conflict with or hold up that process.
%20%20 If there has to be a DA, an Environmental Impact Statement must be undertaken %20an EIS could examine alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years.
%20%20 The EIS must go on Public Exhibition.
%20%20 The benefit of keeping the bags appears to be administrative, in that years are needed to decide the future of the Cafe building, and maybe of Reflections caravan park structures. A key question is therefore, why not remove the Cafe and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?
%20%20 It appears the need for bags at the Cafe was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Information we have received is that there will be two DAs, one for each line of bags. Given that it is all Crown land and the bags, should the two lots of bags not be dealt with as one DA, because each impacts the other?

Thank you for the opportunity to comment.

Submission on Clarkes Beach sandbagging DA

[← Reply](#) [↶ Reply All](#) [→ Forward](#) [...](#)

Mon 19/07/2021 8:23 PM

Hello,

Here is my submission on the proposal for a DA to enable the sandbags at Clarkes Beach to stay in place for 5 years. Key concerns/points for the proposed DA:

- Byron has long had a policy of 'planned retreat' – structures should "retreat" now to a safe place. This should not take 5 years to achieve.
- A Development Application designed to support buildings with sandbags is a bad signal to send to the community. It creates an expectation that buildings that are threatened by erosion can expect similar treatment and the community, supported by the NSW government and legal precedent, does not wish to encourage this.
- Structures that are on the dunes cannot be the reason that sandbagging gets supported for long periods. Dunes need to be able to self restore -- and they will if natural processes can occur.
- The bags are already there beyond their 3-month "emergency" life and a DA to keep them there is not what Byron wants; they are only supporting structures on the dunes. If there were no buildings or other structures, then this DA would not be necessary.
- Crown Lands agreed to placing the bags as an emergency measure to be removed after 3 months. Their removal should be the priority, not the prolongation of the bag wall.
- The benefit of removing the bags immediately is the ending of downstream erosion (the "end effect"). Other benefits are that turbulence is reduced at the bags themselves, and erosion with it.
- Monitoring shows the coast moving inland now and the rate is likely to increase with climate change and sea level rise. All modelling predictions confirm both those effects.
- At the same time, sand is beginning to come around Cape Byron and into the Bay but it is not adhering to the dunes and it appears that the high escarpment and the bags are part of the reason for the lack of accretion.
- Byron is in the midst of developing a Coastal Management Plan and this project could potentially conflict with or hold up that process.
- If there has to be a DA, an Environmental Impact Statement must be undertaken – an EIS could examine alternatives to the proposal to extend the life of the sandbags from 3 months (already expired) to five years.
- The EIS must go on Public Exhibition.
- The benefit of keeping the bags appears to be administrative, in that years are needed to decide the future of the Cafe building, and maybe of Reflections caravan park structures. A key question is therefore, why not remove the Cafe and Reflections structures now and allow the escarpment to collapse to a safe configuration (naturally or with help)?
- It appears the need for bags at the Cafe was due, in part at least, to Reflections placing bags on the escarpment near their commercial activity. Information we have received is that there will be two DAs, one for each line of bags. Given that it is all Crown land and the bags, should the two lots of bags not be dealt with as one DA, because each impacts the other?

Thank you for the opportunity to comment.

With Warmth,

APPENDIX 6 STATUTORY DECLARATION

Statutory Declaration
OATHS ACT 1900, NSW, EIGHTH SCHEDULE

I, Robyn Campbell, do solemnly and sincerely declare that
[name of declarant]

the consultation activities as documented in this report were undertaken in accordance with the Byron Shire Council Community Participation Plan (October 2019) and I make this solemn declaration conscientiously believing the same to be true, and by virtue of the provisions of the *Oaths Act 1900*.



Declared at: Ballina on 9 August 2021
[place] *[date]*

R Campbell
[signature of declarant]


in the presence of an authorised witness, who states:

I, Bernardus Adrianus VELING, a Justice of the Peace JP NSW 102856
[name of authorised witness] *[qualification of authorised witness]*

certify the following matters concerning the making of this statutory declaration by the person who made it: *[* please cross out any text that does not apply]*

1. *I saw the face of the person ~~OR *I did not see the face of the person because the person was wearing a face covering, but I am satisfied that the person had a special justification¹ for not removing the covering, and~~ 
2. *I have known the person for at least 12 months ~~OR *I have confirmed the person's identity using an identification document and the document I relied on was~~ 

.....
[describe identification document relied on]


[signature of authorised witness]

9 August 2021
[date]

¹ The only "special justification" for not removing a face covering is a legitimate medical reason (at September 2018)