

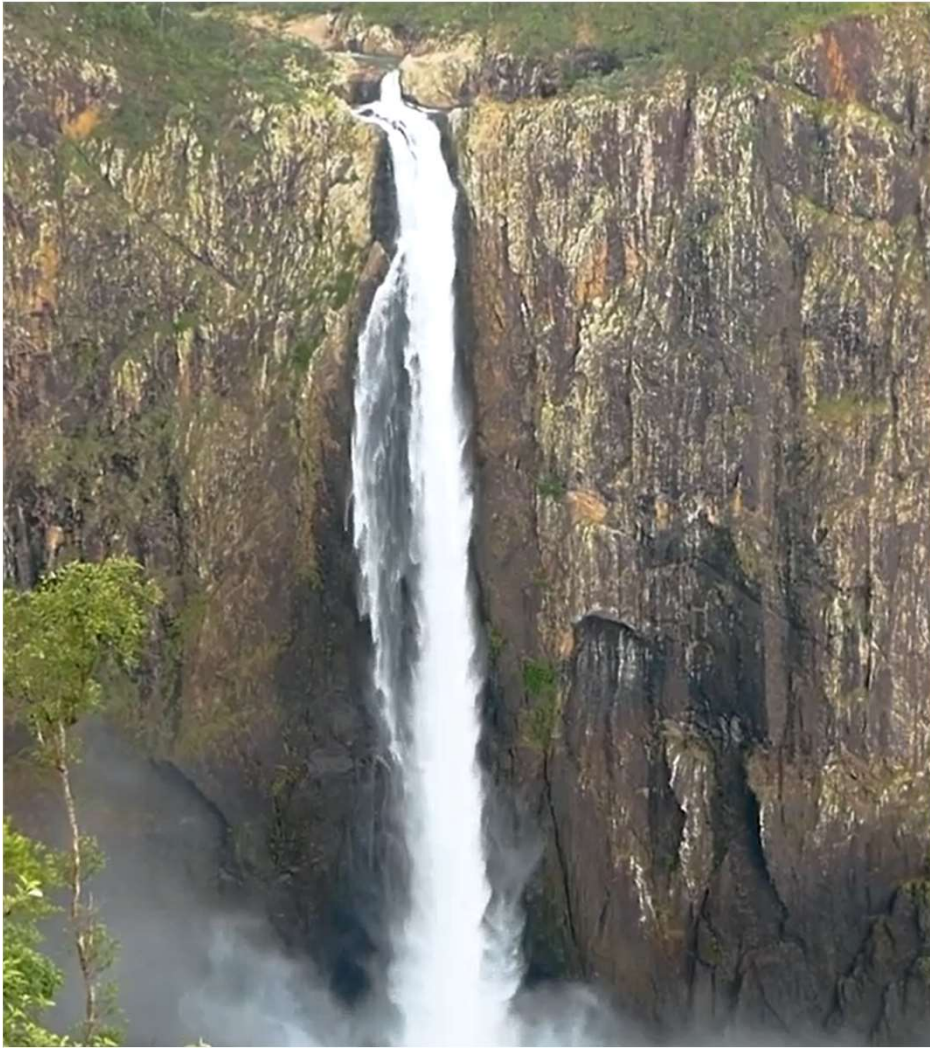


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SHIRE COUNCIL

Taylor's Beach Coastal Community Workshop Recap



Acknowledgements



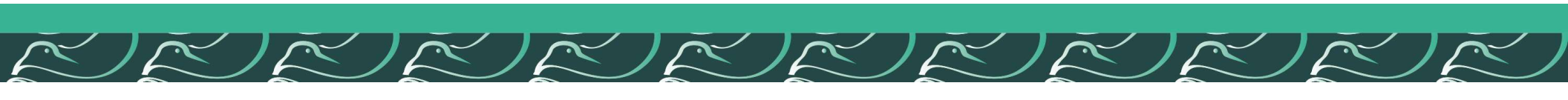
Council acknowledges the Traditional Owners of the Hinchinbrook Shire; the Nywaigi, Warrgamay and Bandjin clans.

We pay our respects to elders past, present and emerging.



Outline of this Session's Agenda:

Time	Agenda Item	Agency
6.00pm – 6.10pm	Welcome, introduction and recap of the project to date	HSC
6.10pm – 6.15pm	Results of the community survey	WT
6.15pm – 6.25pm	Quick recap of erosion issues and risks	WT
6.25pm – 6.30pm	How we identify and rank potential management actions	WT
6.30pm to 7.00pm	Summary of potential actions	WT
7.00pm	Intermission – Refreshments provided (drinks not included)	All
7.10pm – 7.50pm	Q&A with project team and initial feedback	HSC, WT
7.50pm – 8.00pm	Where to from here, next steps and close	HSC, WT



Overview

Project covers 3 coastal townships:

Lucinda and
Dungeness

Taylors Beach

Forrest Beach

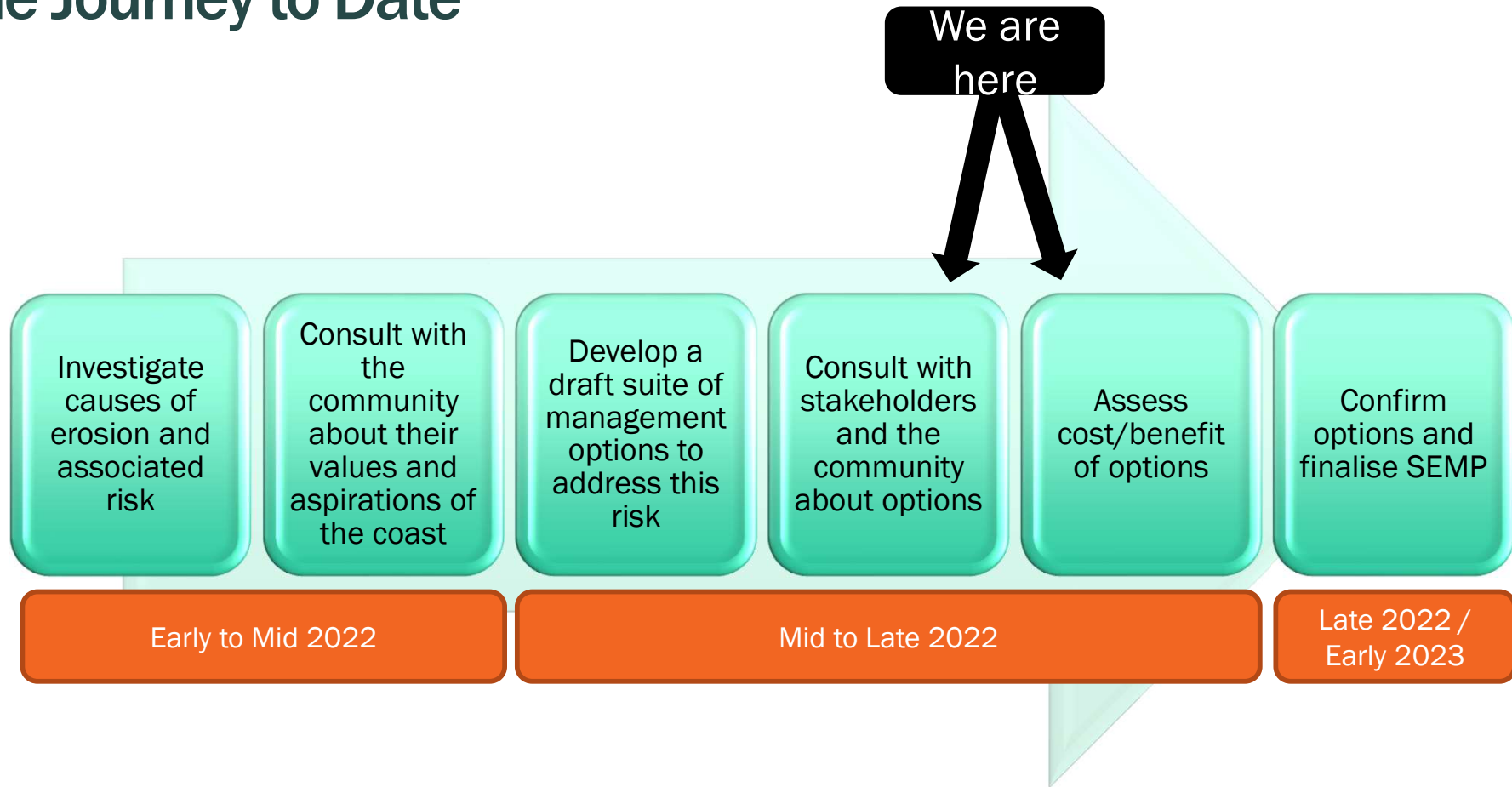
Aims:

Investigate the causes of coastal erosion,
and potential future impacts/risks.

Develop a suite of management actions
(recommendations) to address this risk
over future planning horizons.



The Journey to Date



Taylors Beach



On 27 April 2022 a Coastal Community Workshop was held at the Halifax Hotel where 35 people attended.

Walking the Landscape: Creation of the Lower Herbert Delta

History of Taylors Beach: Digital Earth Imagery

Coastal Processes 101: Water Technology

Explored the Values and Threats of Taylors Beach and surrounds.

What's working elsewhere... Adam King (TCC)



Walking the Landscape



Key Points:

- ✓ The Herbert River has moved several times.
- ✓ Taylors Beach is complex with both estuarine and coastal processes at play.
- ✓ The area has a lot of intrinsic values.



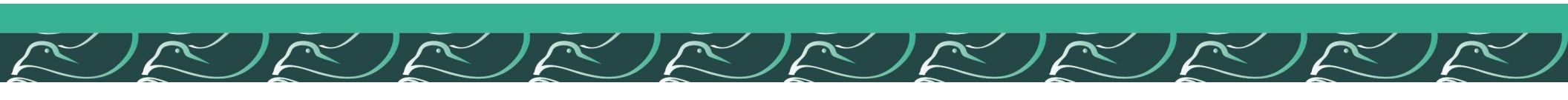
History



So what's changed?

- The coastline from Forrest Beach to Taylors Spit is relatively stable.
- The Taylors Spit continues to grow and recede over time.
- The mouth of Victoria Creek and Spit is highly dynamic and constantly changing.

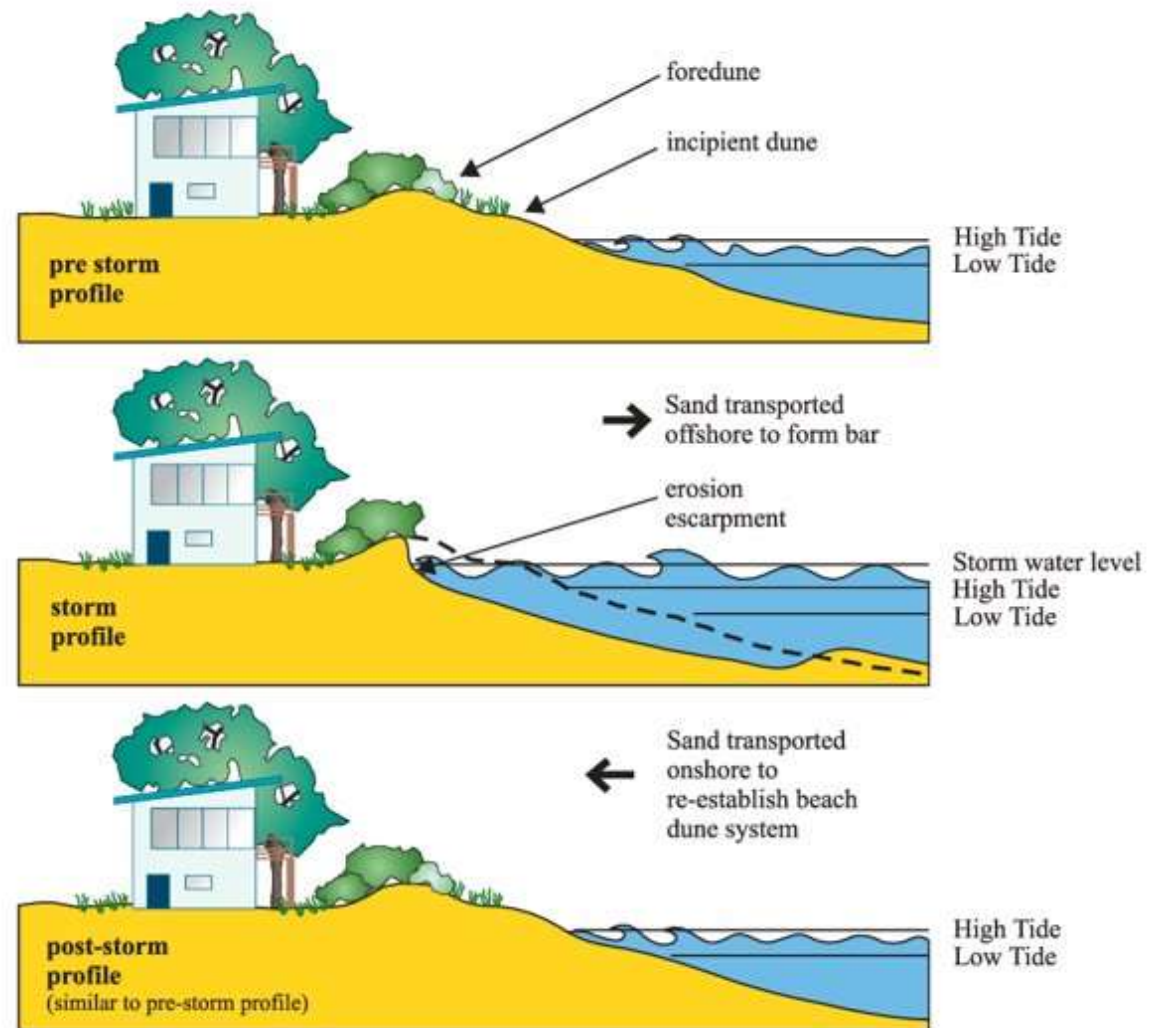
Source: <https://maps.dea.ga.gov.au/>



Coastal Processes 101

Key Concepts:

- ✓ Sand moves north.
- ✓ This occurs due to the wind, waves and tides.
- ✓ Erosion of, and rebuilding of sand dunes is a natural and cyclic process.
- ✓ Drivers of Change:
 - ❖ Poor land management practices.
 - ❖ Increased cyclone intensity/ frequency; and
 - ❖ Sea level rise.



Taylors Beach

Values

High value access to recreation

Extensive wetland systems

Taylors Beach Spit

High value coastal vegetation and marine habitats

Threats

Storm surge and tidal inundation

Shoreline recession

Sea level rise

Over extraction of fresh groundwater

Impacts of people



What works elsewhere?

Presented by Adam King (TCC)

Key Concepts:

- ✓ Sand moves north.
- ✓ Coastlines never stay still.
- ✓ Shorelines have always eroded **but used to recover**.
- ✓ Poor planning and/or land use management prevents recovery.
- ✓ Community Education is key.

Case studies:

- Saunders Beach;
- Horseshoe Bay; and
- Bushland Beach.



Natural Coastal Change Adaptation

A new top of beach was deposited 10m inland and 1m higher by Cyclone Yasi, establishing a new dune throughout the bay, (yellow line below) capable of dissipating the energy of future storms, and Council assets were buried





Council pushed all the sand off the park infrastructure, back onto the beach – negating any future climate change adaptation benefits



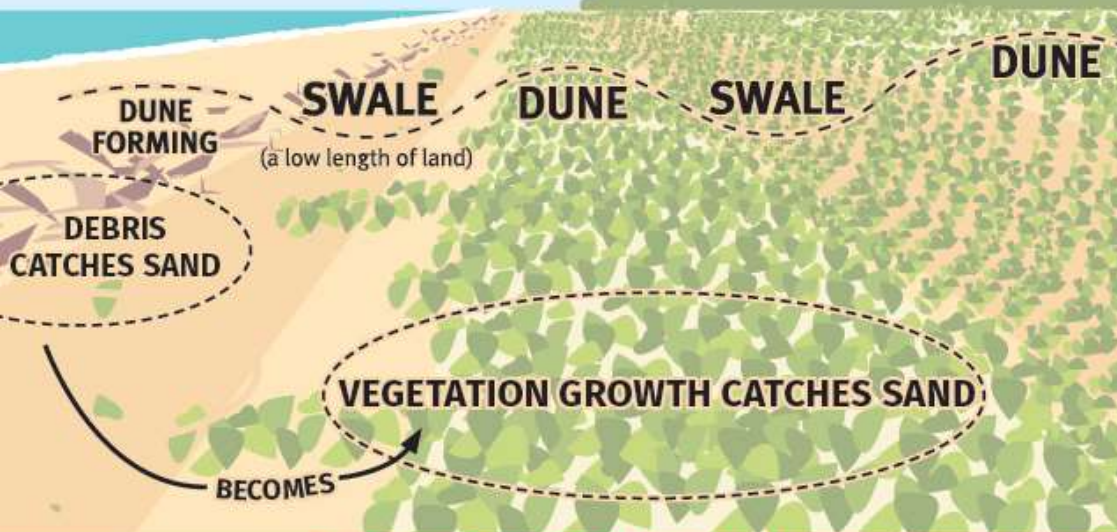
Brushing the sand off the grass back onto the beach slope rather than retaining the sand

6 EASY STEPS TO GROW YOUR ESPLANADE



- 1 Let debris collect on the high tide line**
Debris catches sand and provides nutrients for seeds to germinate. The plant growth will catch more sand and build a dune, stepping the Esplanade forward.
- 2 Install sand traps**
Seek an assessment and permission from Townsville City Council to install sand traps, where appropriate, to catch windblown sand.
- 3 Plant coastal vegetation**
Seek approval from Council to plant native grasses, vines, bushes and trees, which are available from Council, free of charge.
- 4 Don't mow coastal vegetation or plant landscape grasses**
Mowing coastal vegetation leads to erosion and non-native grasses don't have horizontal stems that catch sand and build dunes.
- 5 Use public pedestrian paths**
Pedestrian paths are provided for safe beach access and minimise vegetation damage caused by the use of unapproved access paths.
- 6 Take your green waste to the tip**
Disposing of garden waste in the Esplanade or on the beach promotes the growth of weeds which out compete coastal plants and these plants don't help grow your Esplanade.

BEACH RECOVERY PROCESS



Behavior Change is Essential for Beach Recovery

Council and the Saunders Beach Community achieved seaward esplanade growth of 20 meters in 6 years through behavior change and with it, esplanade land use change, reinstating a more natural dune and swale coastal system.

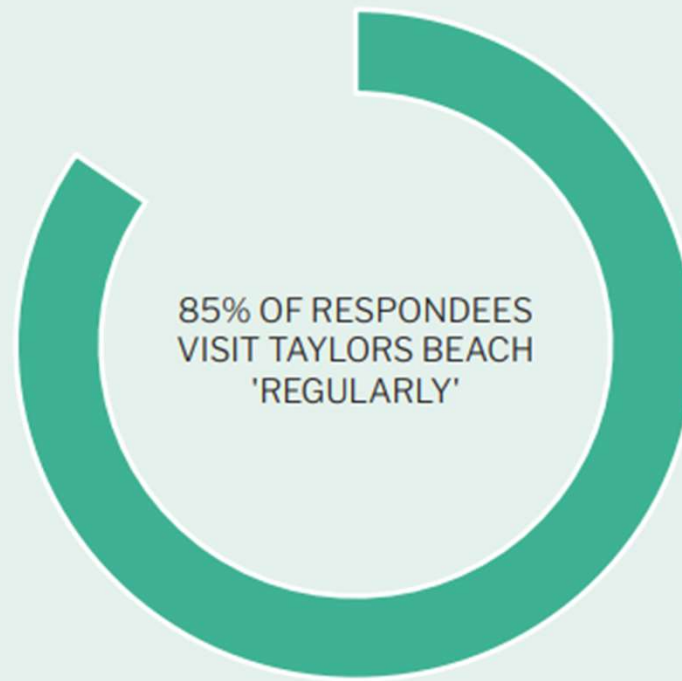
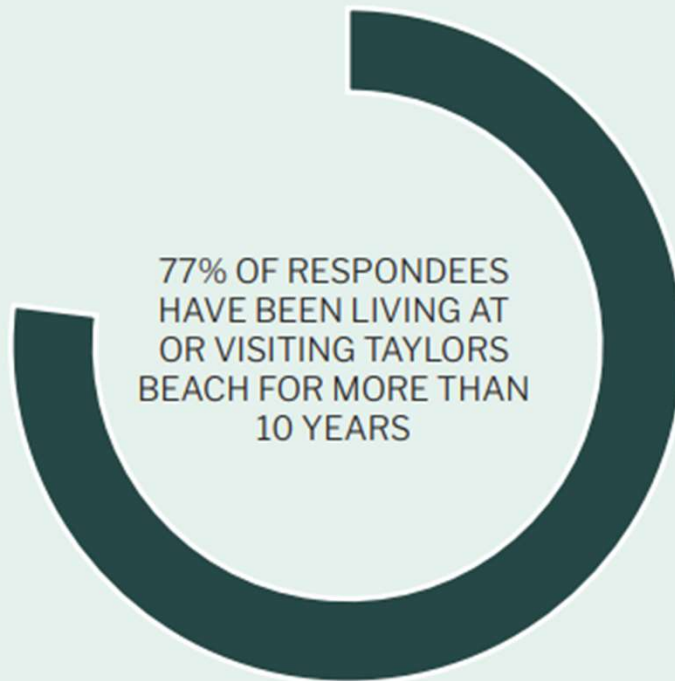


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Taylors Beach Coastal Community Survey Results



CONSULTATION SUMMARY TAYLORS BEACH COASTAL RESERVES



People visit Taylors Beach for a wide variety of reasons, with the most popular being:

- **Fishing;**
- **Boating;**
- **Beach activities (i.e. running, sitting, relaxing on the sand); and**
- **Nature observation.**

CONSULTATION SUMMARY TAYLORS BEACH COASTAL RESERVES

What do you value about Taylors Beach? Respondee's top answers:

- **Scenic Values** - because it is beautiful;
- **Environmental Values** - because it allows me to connect with nature; and
- **Recreational Amenity** - because of the recreational uses it provides me.

TOP COASTAL CHANGES OF CONCERN

1

Coastal erosion from a cyclone resulting in permanent loss of *public* land.

2

Coastal erosion from a cyclone resulting in permanent loss of *private* land.

3

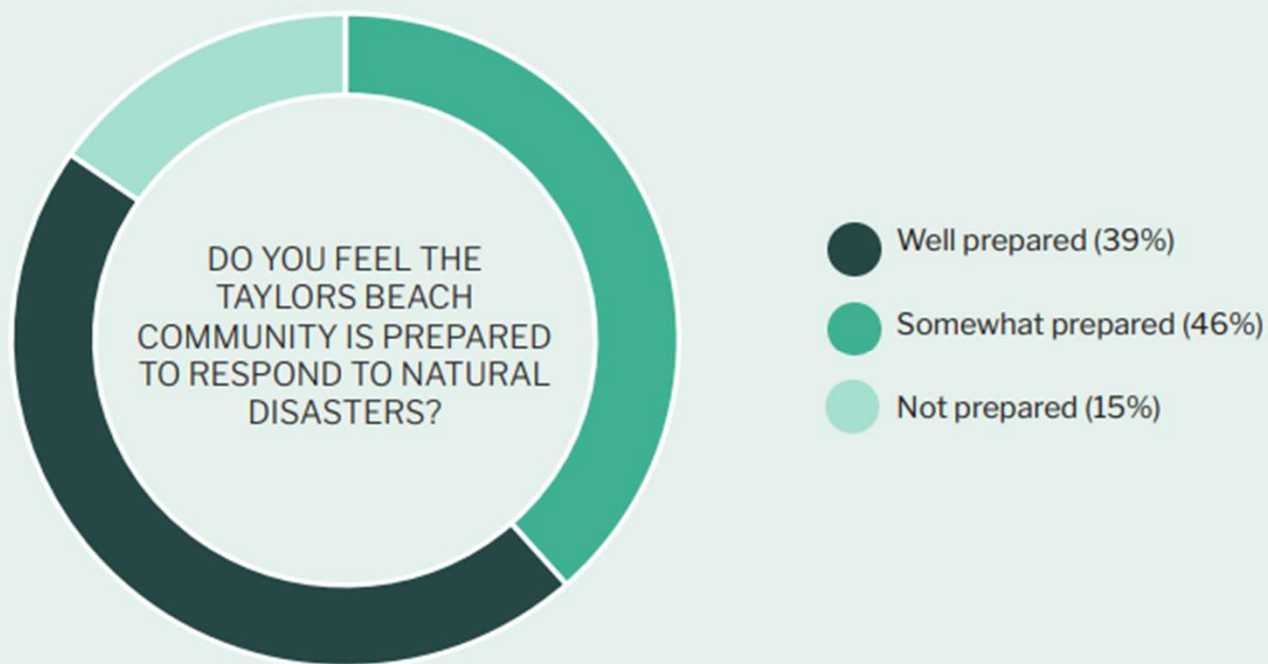
Gradual invasion of dry *public* and *private* land by water due to sea level rise.

CONSULTATION SUMMARY TAYLORS BEACH COASTAL RESERVES

COASTAL ADAPTATION OPTIONS

MOST SUPPORTED

1. Revegetate and stabilise the coastal dunes and foreshore;
2. Limit access to controlled access points, to support coastal vegetation growth; and
3. Prevent/limit further development in vulnerable areas.



RESPONDEES RANKED FACTORS TO CONSIDER WHEN MAKING DECISIONS ABOUT COASTAL ADAPTATION MEASURES

(1) MOST IMPORTANT TO (6) LEAST IMPORTANT

Overall Ranking

1. Maintaining coastal vegetation and natural ecosystems;
2. Maintaining access to the sandy beach or amenity and recreational use;
3. Maintaining grassed public open space areas;
4. Protecting and continuing to provide public facilities close to the coast;
5. Protecting private residences and properties; and
6. The financial cost of coastal adaptation actions.



CONSULTATION SUMMARY

TAYLORS BEACH COASTAL RESERVES

Council recently opened a survey for the community to have their say on the future management options of Lucinda, Taylors Beach and Forrest Beach coastal reserves.