Coastal management program update
November 2020

The coast is one of our greatest assets. We know there are concerns in our community about the changing coastal environment. Some changes we're already seeing — for others, we need to look into the future for what's likely to happen.

What is a coastal management program?

A coastal management program (CMP) sets the long-term strategy for managing our coast. It identifies risks to our coast and how to manage these now and into the future, so we can all continue to enjoy the benefits of the coast for years to come. This is a requirement for all NSW councils under the Coastal Management Act 2016.

Where is the CMP up to?

Over the past 2 years we've been working behind the scenes on the foundations of the CMP and talking with our community about how you use and value the coast.

In stage 1, our scoping study determined the main coastal hazards impacting Port Stephens are coastal erosion, coastal inundation and windblown sand. You can find out more about these hazards over the page.

Having your say on coastal hazards

As part of stage 2, we'll be holding a webinar series about our draft coastal hazard modelling.

You'll hear from technical coastal experts and have an opportunity to ask questions about each hazard.

Register for our webinars:

Windblown sand (dune transgression)	Coastal inundation	Coastal erosion
Monday 16 November 5 to 6pm	**Monday 23 November** 5 to 6pm	**Wednesday 25 November** 12 midday to 1pm

All webinars will be recorded. Register at:
haveyoursay.portstephens.nsw.gov.au/coastal-management-program

Coastal hazards explained

Windblown sand (dune transgression)

Stockton Bight hosts one of the largest transgressive dune systems in the southern hemisphere.

These barrier dunes migrate landwards over time due to prevailing onshore winds.

The movement of the sand dunes is caused by:

- wind direction
- wind frequency
- wind strength
- sand grain size
- sand grain type.

In stage 2, we mapped the projected area where Stockton dunes will move to help us in the next 20, 50 and 100 years to help us determine how to better plan for the future.

Coastal inundation

Coastal inundation is the temporary or permanent flooding of land by tides, waves and catchment influences. Locally, coastal inundation is driven by:

- tides
- storm surge
- wave action
- sea level rise.

Current climate change projections released by the Intergovernmental Panel on Climate Change (IPCC) predict sea level rise will increase by more than 1 metre by 2120. This means we must plan for the risk of coastal inundation.

Port Stephens is a large tidal estuary and we can already see the impacts of coastal inundation in some areas after king tides and large storm events. The coastal management program will help us identify high-risk areas and manage the impact of coastal inundation more effectively.

Coastal erosion

Sand movement naturally occurs on beaches. Several factors increase the movement of sand between:

- beaches
- the lower beach and dunes
- the beach and the shoreline.

Coastal erosion occurs when there is an ongoing imbalance in sand movement resulting in the continued loss of sediments. Locally, coastal erosion is driven by:

- Storm erosion — large storms cause beach and dune sediment to be removed and pulled offshore into a sand bar. These sediments are usually recovered in the months after as calmer conditions rework them onto the beach.
- Sea level rise recession — rising sea levels result in small amounts of sediment from erosion events not being recovered, leading to a steady shoreline retreat.

In stage 2, we'll identify priority areas of erosion and how it may occur in the future.

What's next?

In early 2021, we'll begin stage 3 of the CMP. This will involve working with our community to identify management options for our coastal hazards.

HAVE YOUR SAY *P.s*

Read more about the project and complete our mapping activity at: **haveyoursay. portstephens.nsw.gov.au**