



Department of Planning and Environment

Stockton Beach Repair Blueprint

Setting out the NSW Government's commitment
to deliver sand nourishment to Stockton Beach



Acknowledgement of Country

The NSW Government acknowledges the Traditional Custodians of the lands and waterways to which the Stockton Beach Repair Blueprint applies, the Worimi and Awabakal peoples, and pays respect to Elders past, present and future. The NSW Government recognises and respects the continuation of cultural, spiritual and educational practices of Aboriginal peoples.

This blueprint acknowledges more than 60,000 years of continuous connection to the land, waterways and sea that make up New South Wales.

Aboriginal people's knowledge and management of the land and sea are based on deep spiritual connections with Country. Country takes in everything within the cultural, spiritual and physical landscape – landforms, waters, plants, animals, foods, and special places. These continued connections are also visible in their songs, stories, dances and art, and reinforced by their continued cultural practices and knowledge of Country.

As part of the world's oldest living culture, the Aboriginal people of the Australian continent and adjacent islands share a unique bond to Country – a bond forged through thousands of years of interaction with land and sea environments.

Foreword



Stockton Beach holds a great deal of significance for many in the Greater Newcastle region. It is a place of natural beauty, significant Aboriginal and European heritage and an area for recreational enjoyment. Stockton Beach has also been facing a serious erosion issue for many years, which has greatly reduced the usability of the beach and resulted in the coastal environment not meeting the expectations of the community.

The NSW Government is committed to protecting and restoring Stockton Beach for the benefit of locals and visitors alike and has allocated \$21 million in funding to repair it and return it to a state that meets expectations. This commitment is in line with community wishes and City of Newcastle's coastal management program for Stockton. This funding will help to restore the beach, improve its recreational amenity and protect public assets.

Beach nourishment works are complex. A beach repair project of this scale has not yet been undertaken in New South Wales. This Stockton Beach Repair Blueprint sets out how the NSW Government is proposing to deliver this exciting opportunity for Stockton and the Greater Newcastle community.

We recognise the importance of our beaches as natural assets and public spaces that contribute to our quality of life and wellbeing. We are determined to preserve and enhance them for the enjoyment of all.

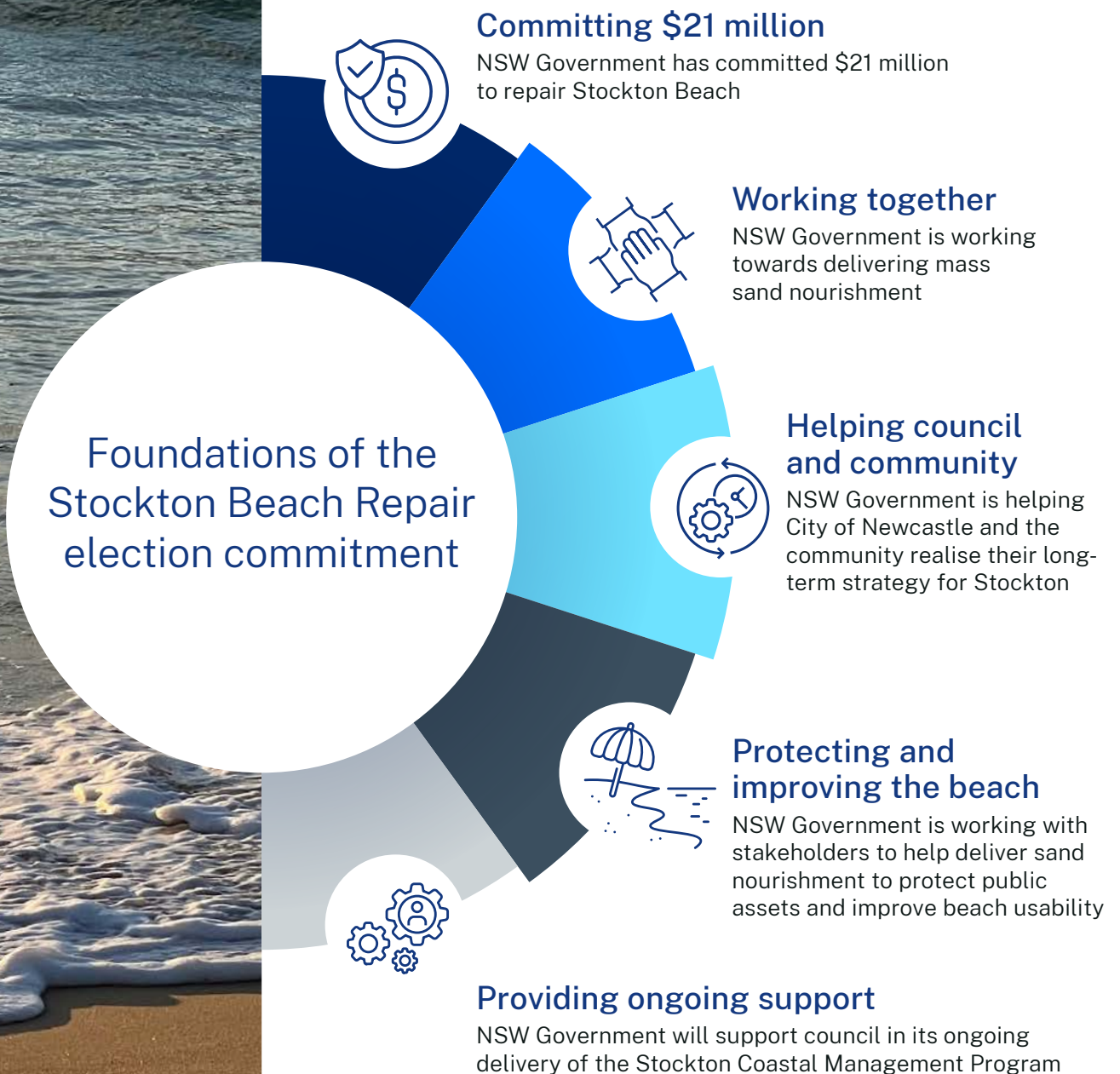
**The Hon Penny Sharpe, MLC
Minister for the Environment**

Stockton Beach Repair Blueprint

The NSW Government has committed \$21 million to repair Stockton Beach through the delivery of sand nourishment.

Mass sand nourishment is the community's preferred long-term coastal management strategy for Stockton that is outlined in City of Newcastle's Stockton Coastal Management Program 2020.

This Stockton Beach Repair Blueprint describes the NSW Government's program of beach nourishment initiatives that will improve the usability of Stockton Beach and reduce risks from coastal hazards.



The NSW Government will provide project governance, proactive communication and engagement, and a targeted monitoring program for the duration of the Stockton Beach Repair election commitment.

The blueprint identifies 5 key phases for delivery.



1

Complete the initial beach nourishment activity and identify preferred nourishment sand sources, delivery methods and scope out other initiatives that may assist in repairing Stockton Beach



2

Complete the environmental assessments, obtain approvals, licences and permits and finalise the design and tender documents as required to access nourishment sand



3

Award the dredging contract and complete the sand nourishment activity to improve beach condition and usability and improve protection for private and public assets



4

Monitor the beach and move towards longer-term management arrangements



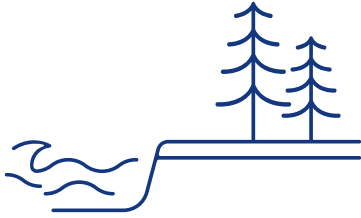
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Facilitate ongoing beach management and maintenance by beach managers

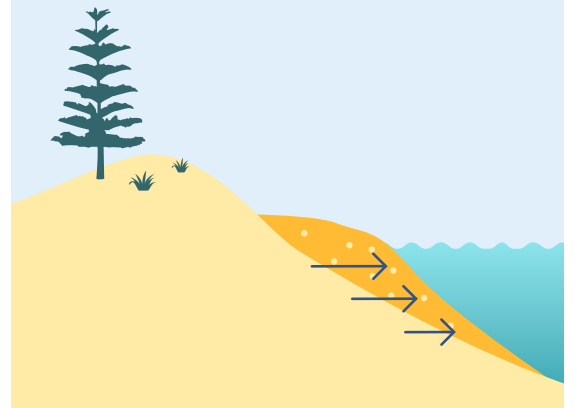
Phase 1 is currently underway, with initial beach nourishment sand delivered to Stockton in October and November 2023.

What is beach nourishment?

sand nourishment
improves
beach usability



Beach nourishment can build
a wider beach at Stockton



Beach nourishment is the mechanical placement of sand on a beach to improve the usability of the beach and improve the protection of coastal assets.

Beach nourishment is one of a range of possible coastal management strategies used at many sites around the world including Australia, Asia, Europe and the Americas. It is generally considered to be a 'soft' management option, which aims to mimic the natural beach system. It may be used in conjunction with other coastal management strategies.

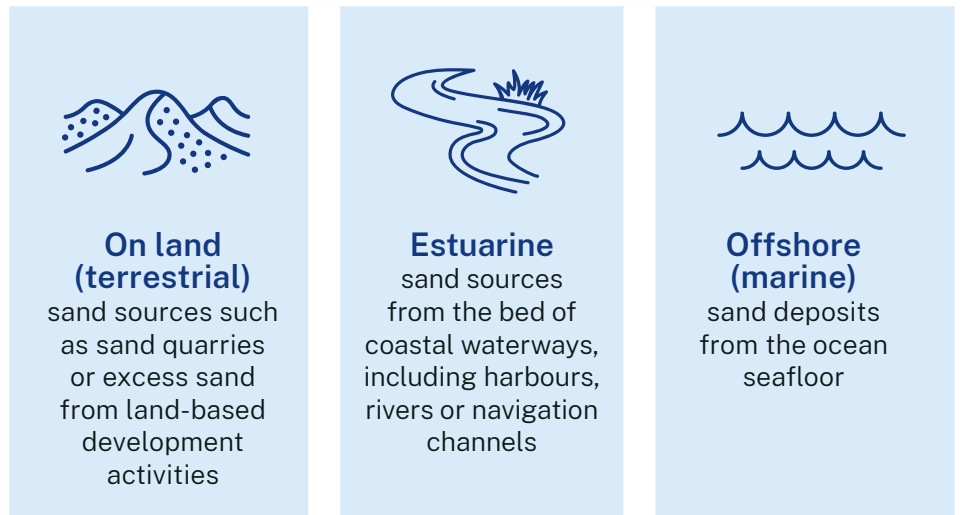
Why has beach nourishment been proposed?

Stockton Beach has a long history of coastal erosion impacts that have threatened private and public assets and degraded the beach. Over several decades, various beach management activities have occurred including the construction of coastal protection works, temporary protection works, emergency management responses, and small-scale beach nourishment campaigns to improve beach usability.

Large-scale or mass beach nourishment is the community supported erosion management strategy that has been proposed by City of Newcastle to increase the protective buffer between the ocean and public assets along the Stockton shoreline and improve beach usability.

Through its Stockton Coastal Management Program 2020, the council has identified 'mass' sand nourishment as its adopted strategy for managing coastal hazards (such as erosion) at Stockton Beach.

Where can nourishment sand come from?



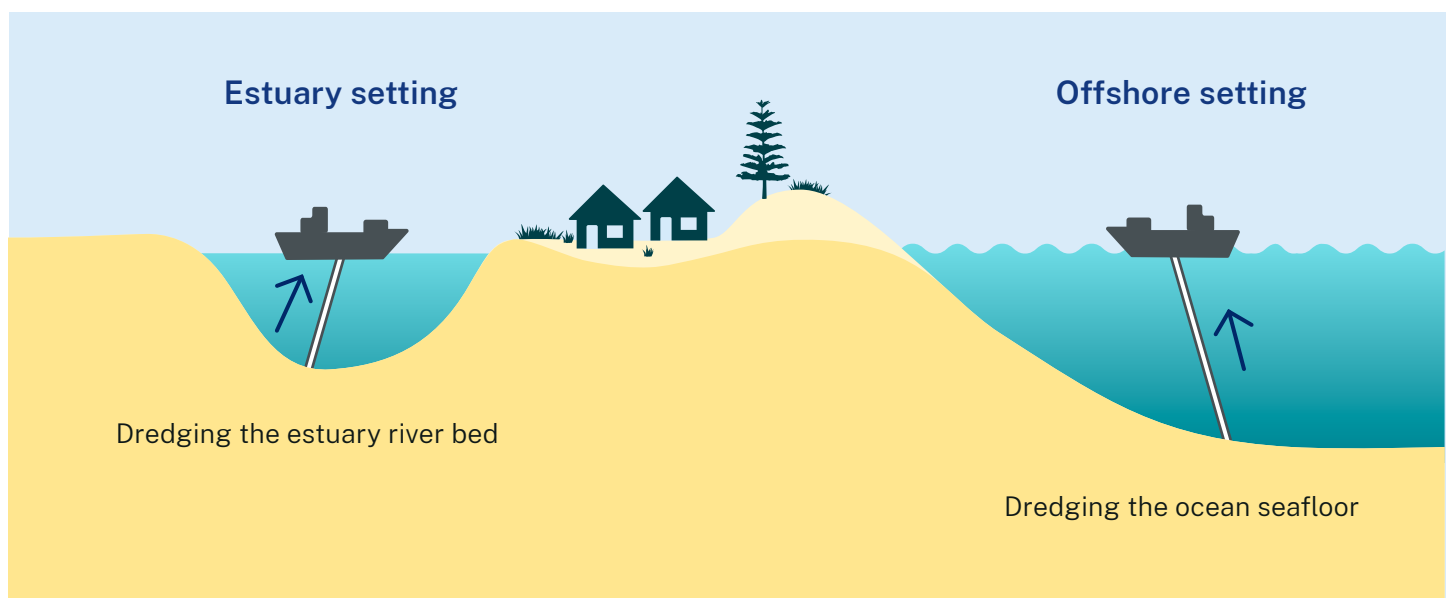
The NSW Government will focus sand source investigations on potential estuarine and offshore sources of sand for Stockton Beach. This is because large and potentially ongoing quantities of sand are needed to achieve and maintain the mass sand nourishment outcomes.

How can nourishment sand be accessed and delivered to Stockton?

Dredging is the most common method of extracting, transporting and placing nourishment sand onto a beach. Sand may be excavated from the seafloor and 'rainbowed' or dropped near to the beach. Sand may also be pumped to the beach through pipelines.

There are many types of dredges. Large dredges are needed for marine settings that are exposed to wave action. Smaller dredges are more common in estuary environments.

Beach nourishment sand can be dredged from a range of sand sources



Sand can be delivered to the beach in different ways

Bottom dumping

Sand can be placed in the nearshore zone. Waves move the sand onto the beach over time



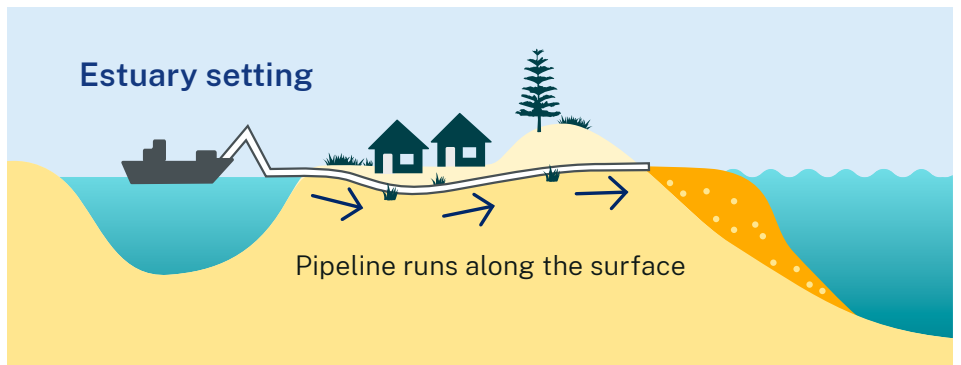
Rainbowing

Sand can be 'rainbowed' into the surf zone. Waves move the sand onto the beach over time



Pumping ashore

Sand can be pumped through pipes directly onto the beach



Sand source investigation and beach nourishment areas



Why is the NSW Government involved?



The NSW Government has established a modern and integrated coastal management framework to better equip coastal communities to respond to existing and future coastal management challenges and opportunities. The purpose of the framework is to manage how the coastal environment is used and developed in an ecologically sustainable way, for the social, cultural and economic wellbeing of the people of New South Wales.

The NSW Government has committed \$21 million to repair Stockton Beach by delivering sand nourishment. This commitment will support the council to implement the actions in its coastal management program.

What has the NSW Government committed to?

The NSW Government has committed to supporting the Stockton community and council with a program of beach nourishment initiatives.



Delivering
the initial
Stockton Beach
Nourishment Project,
majority funded through the
Commonwealth Government's
Coastal and Estuarine Risk
Mitigation Program



\$21
million

Delivering sand nourishment
to Stockton Beach,
funded through the NSW
Government's \$21 million
election commitment



Bringing
key
stakeholders
together

to work towards a longer-term
solution to the coastal erosion
issues at Stockton



Supporting
council

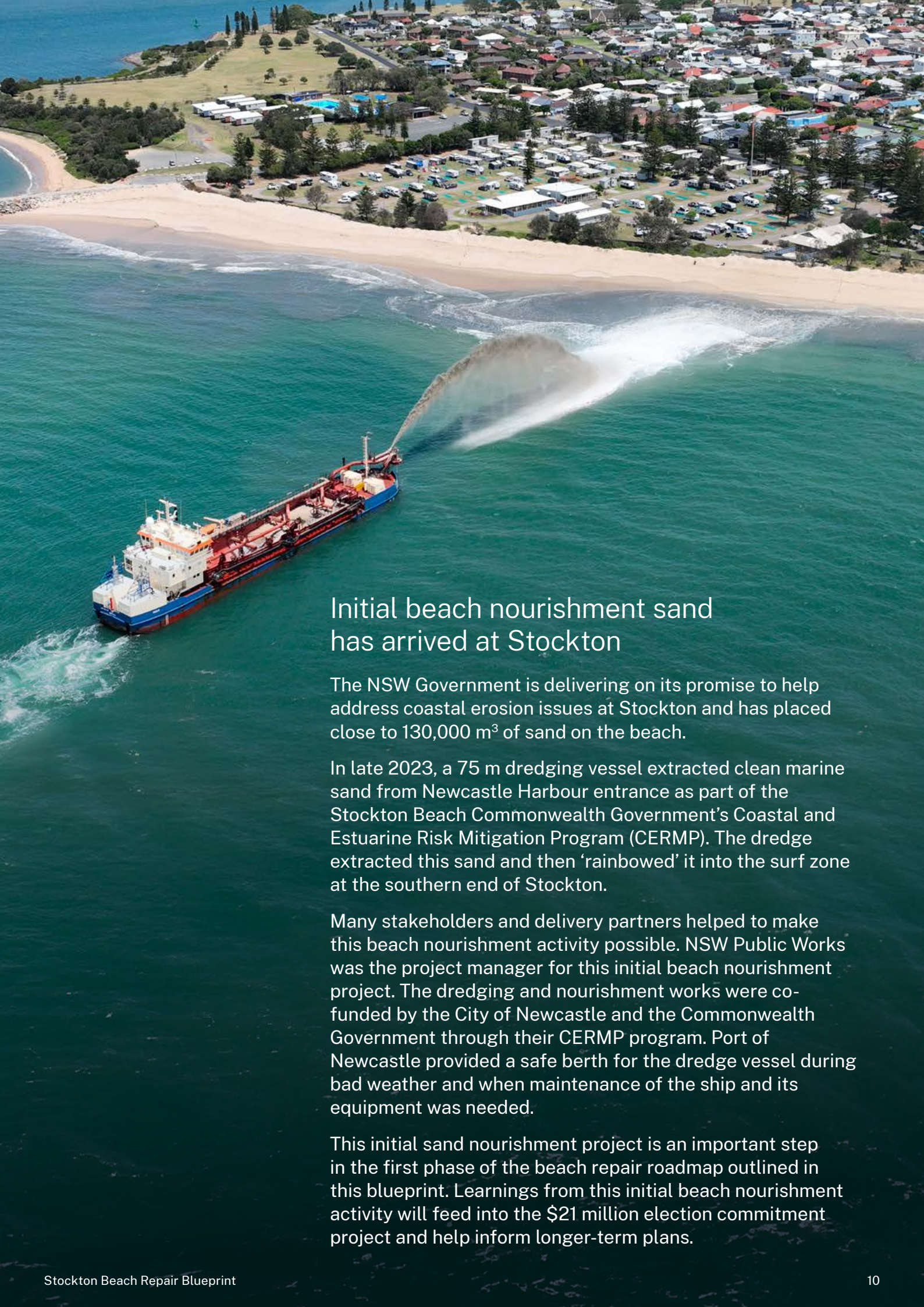
with the ongoing
implementation of its Stockton
Coastal Management Program

When can the sand dredging and beach nourishment start?

In late 2023, the NSW Government delivered an initial sand dredging and beach nourishment activity at Stockton with support and assistance from the City of Newcastle and Port of Newcastle.

There are multiple tasks that must be completed before larger-scale dredging and sand nourishment plans can be progressed. Technical investigations are required to identify the preferred sand source and delivery method. Environmental assessments and designs need to be prepared and the necessary approvals, licences and permits must be obtained.

The NSW Government is committed to delivering the Stockton Beach Repair election commitment project, as soon as possible.



Initial beach nourishment sand has arrived at Stockton

The NSW Government is delivering on its promise to help address coastal erosion issues at Stockton and has placed close to 130,000 m³ of sand on the beach.

In late 2023, a 75 m dredging vessel extracted clean marine sand from Newcastle Harbour entrance as part of the Stockton Beach Commonwealth Government's Coastal and Estuarine Risk Mitigation Program (CERMP). The dredge extracted this sand and then 'rainbowed' it into the surf zone at the southern end of Stockton.

Many stakeholders and delivery partners helped to make this beach nourishment activity possible. NSW Public Works was the project manager for this initial beach nourishment project. The dredging and nourishment works were co-funded by the City of Newcastle and the Commonwealth Government through their CERMP program. Port of Newcastle provided a safe berth for the dredge vessel during bad weather and when maintenance of the ship and its equipment was needed.

This initial sand nourishment project is an important step in the first phase of the beach repair roadmap outlined in this blueprint. Learnings from this initial beach nourishment activity will feed into the \$21 million election commitment project and help inform longer-term plans.



Beach nourishment delivery partners

Department of Planning and Environment

The Department of Planning and Environment's Environment and Heritage Group is delivering the NSW Government's \$21 million election commitment to repair Stockton Beach. The department will work closely with the project partners, including council, traditional owners and the community, to ensure sand can be delivered to Stockton Beach as soon as possible.

Department of Regional NSW

The Department of Regional NSW through NSW Public Works is delivering the initial Stockton Beach Nourishment Project and the broader CERMP project.

City of Newcastle

City of Newcastle is responsible for managing Stockton Beach and implementing the Stockton Coastal Management Program. In 2020, council prepared its first coastal management program for Stockton that outlined a community supported program for mass sand nourishment to address erosion risks and improve beach usability.

Council remains responsible for the ongoing coordinated management of Stockton Beach throughout and beyond completion of the beach repair project.

Supporting stakeholders

The community, local industries and other agencies are also supporting the various Stockton Beach nourishment initiatives, including through their representation on the Stockton Beach Taskforce.

Traditional owners

Aboriginal people are the original inhabitants and custodians of Stockton Beach, and they continue to have a cultural connection and understanding of the surrounding coastal landscape and waterways.

The NSW Government is committed to building, maintaining and strengthening relationships with the Worimi people throughout planning and delivering on its Stockton Beach election commitment project.



Beach nourishment initiatives

The NSW Government is taking a responsible and balanced approach to delivering its \$21 million Stockton Beach Repair election commitment.

The project will build on existing initiatives that are currently underway to help council and the Stockton community realise their long-term coastal management strategy.

Initial Stockton Beach nourishment – Coastal and Estuarine Risk Mitigation Program

In delivering the first part (Part A) of the CERMP initiative, NSW Public Works has completed an initial phase of beach nourishment at Stockton that will help to improve beach usability and provide a buffer against storms over the short term.

Moving forward, Parts B and C of the CERMP initiative will be investigating potential sand sources, as well as completing technical and design work, and environmental assessments that are required to meet the larger, longer-term requirements for sand nourishment. This important work will enable flexibility in the plans for accessing large volumes of sand from either the North Arm of the Hunter River or from offshore marine areas. Multiple sources and approvals will be investigated to provide flexibility to all parties in meeting the large ongoing sand requirements for the Stockton community, to combat future sand losses, storm impacts and sea level rise.

The CERMP initiative is funded by a \$4.7 million Commonwealth grant and a \$1.5 million contribution from council. This work will prepare for and inform the delivery of the NSW Government's \$21 million election commitment project.

Stockton Beach Repair

The Department of Planning and Environment is working closely with NSW Public Works and will use the outputs of the CERMP beach nourishment initiative to inform how sand nourishment is delivered to Stockton Beach. The 'roadmap for delivery' in this blueprint outlines how this will be achieved, including timeframes and projected outcomes.

Stockton Coastal Management Program

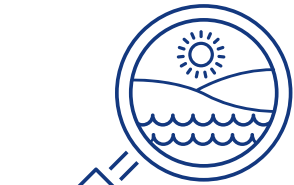
The City of Newcastle is responsible for the ongoing management of Stockton Beach and leading the implementation of its Stockton Coastal Management Program. The council has advised that ongoing maintenance of sand nourishment (sand top-ups) will be its preferred long-term beach management approach in its revised Stockton Coastal Management Program, which is expected to be finalised in 2024.

Delivering the CERMP initiative and Stockton Beach Repair election commitment, and monitoring the success of those projects, will provide valuable insights to inform and facilitate the ongoing management of Stockton Beach into the future.

Supporting initiatives



Environmental
assessment
and approvals



Monitoring
the beach and
environment

The Stockton Beach Taskforce acts as a reference group, providing a forum for discussion and includes representatives from the City of Newcastle, NSW government agencies, NSW Coastal Council, the Worimi Local Aboriginal Land Council, the Stockton Community Liaison Group and the community.

The NSW Government will deliver the Stockton Beach Repair project with the support of a number of initiatives.

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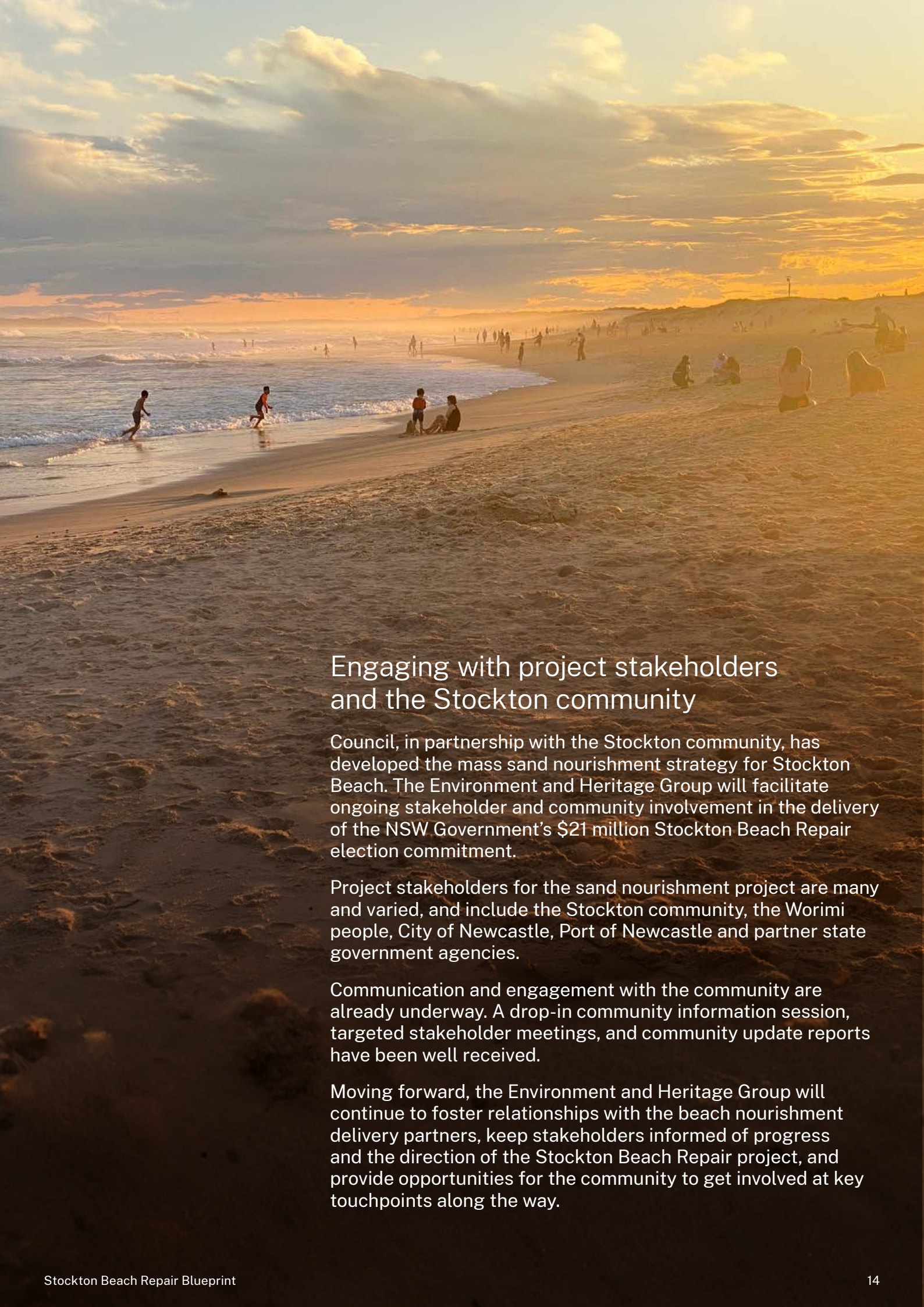
- **Project governance** that will support the beach repair election commitment
- **Environmental assessment, approvals, licences and permits** as required to access sources of nourishment sand
- **Engagement and communication** with key stakeholders, including providing regular information to keep the council, community and traditional owners engaged with the progress and direction of the beach nourishment initiatives
- **Monitoring** to ensure environmental impacts are mitigated or managed, and that the effectiveness and longevity of the nourishment initiatives are understood

There will be challenges along the way

The delivery of mass sand nourishment is complex. A project of this type and scale has not been attempted before in New South Wales. There are multiple uncertainties and challenges to overcome in delivering the beach repair project:

- a preferred, feasible and sustainable source of sand has not yet been confirmed for mass sand nourishment
- various approvals will be required to access sand and the pathway and requirements to obtain these have not yet been established
- the amount of sand that can be delivered is dependent on the sand source, distance of transport, method of access and market forces
- funding and responsibility for implementing future maintenance sand top-ups has not been established.

Despite these challenges, the NSW Government is committed to delivering positive outcomes for Stockton Beach and its community.



Engaging with project stakeholders and the Stockton community

Council, in partnership with the Stockton community, has developed the mass sand nourishment strategy for Stockton Beach. The Environment and Heritage Group will facilitate ongoing stakeholder and community involvement in the delivery of the NSW Government's \$21 million Stockton Beach Repair election commitment.






Project stakeholders for the sand nourishment project are many and varied, and include the Stockton community, the Worimi people, City of Newcastle, Port of Newcastle and partner state government agencies.

Communication and engagement with the community are already underway. A drop-in community information session, targeted stakeholder meetings, and community update reports have been well received.

Moving forward, the Environment and Heritage Group will continue to foster relationships with the beach nourishment delivery partners, keep stakeholders informed of progress and the direction of the Stockton Beach Repair project, and provide opportunities for the community to get involved at key touchpoints along the way.

Roadmap to delivery

The Stockton Beach Repair roadmap sets out the plan for delivering the \$21 million election commitment. This roadmap brings together the many project stakeholders and beach nourishment initiatives.

 Phase 1	 Phase 2	 Phase 3	 Phase 4	 Phase 5
Intended outcomes <ul style="list-style-type: none"> ✓ Complete the initial beach nourishment activity ✓ Identify preferred sand sources and delivery methods ✓ Confirm approval pathways ✓ Scope out complementary beach repair initiatives, if required ✓ Develop a communication and engagement strategy 	<ul style="list-style-type: none"> ✓ Complete the environmental assessments ✓ Obtain approvals, licences and permits ✓ Finalise the design and tender documents, as required, to access nourishment sand 	<ul style="list-style-type: none"> ✓ Award the dredging contract ✓ Complete the sand nourishment activity ✓ Improve beach condition and usability ✓ Improve protection for private and public assets 	<ul style="list-style-type: none"> ✓ Monitor and evaluate the success of beach repair project ✓ Move towards longer-term management arrangements 	<ul style="list-style-type: none"> ✓ Facilitate beach management and maintenance to be led by beach managers
Indicative timeframes 1 year	1–3 years	Timing will be guided by Phases 1 & 2. Indicative 3–5 years	Timing will be guided by Phases 1 & 2. Indicative 3–5 years	5–10 years plus

Beach nourishment initiatives

Stockton CERMP project



\$21 million Stockton Beach Repair project



Stockton Coastal Management Program



Communication and engagement



Monitoring



Next steps

Work has begun on the first phase of this Stockton Beach Repair Blueprint. Project stakeholders and the community will be kept informed as the project progresses. Monitoring will measure the success of the Stockton Beach Repair election commitment. Knowledge gained from this project will help guide how Stockton Beach is managed over the longer term.



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