Bundaberg Regional Council Bargara SEMP Implementation Study Case Study

Introduction

Introduction	The Bargara coastline, situated east of Bundaberg, boasts a diverse landscape encompassing sandy and rocky shores, pocket beaches, and various coastal structures. Recognising the inherent dynamism of coastal zones and the threat of erosion impacting local infrastructure, Bundaberg Regional Council developed the Bargara Shoreline Erosion Management Plan (SEMP).
Project overview	Covering the foreshore area from The Point to the Bargara Sports Complex, this framework aims to proactively address erosion concerns while ensuring the preservation of natural coastal processes. Notably, Kellys Beach falls outside the SEMP's scope due to a lower erosion threat, but it's included in the broader Bundaberg Coastal Hazard Adaptation Strategy for long-term adaptation planning

Project Details

The Shoreline Erosion Management Plan (SEMP) is a holistic strategy blending technical coastal expertise with community values and Council resources. It's structured to guide immediate to shortterm actions (up to 20 years), addressing erosion hotspots along the coastline while investigating underlying causes and future impacts.

This comprehensive approach aims to harmonise Council capabilities with community aspirations, ensuring efficient resource allocation while safeguarding the coastline's integrity and aligning management actions with local values.





Project Location





Every Queensland community deserves to be a liveable one



the star

Drivers

The goal of the SEMP for all four coastal segments is to create erosion strategies benefiting Bargara's community in social, economic, cultural, and environmental aspects. The outcomes of this SEMP consider shorter term strategies that align with Bundaberg Regional Council's longer-term CHAS. The SEMP will therefore provide Council with a plan to address issues of immediate concern.

Benefits

The Bargara coastline holds an immense environmental, cultural, and economic significance, serving as a hotspot for biodiversity, conservation efforts, tourism, and lifestyle opportunities. With a vision to become the coastal hub for the Bundaberg region, preserving Bargara's unique character while managing the dynamic coastal environment is a key priority for the community.

Engagement Activities

SEMP engagement occurred in three phases:

- Phase 1 and 2 aimed to understand coastal values through surveys, workshops and an open house session.
- Phase 3 focused on proposed management options for specific sites highlighting erosion hotspots and discussing strategies with stakeholders.

Process

For the current stage of implementation study, the following steps have been completed:

- Sand sourcing study
- Monitoring site survey
- Detailed design and cost estimates
- Approvals for beach nourishment
- Revegetation and management
- Access management

"Through consultation with local residents the CHAS helped us to identify the erosion and inundation risks across the entire Bundaberg Region coastline." – Steve Johnston, CEO of Bundaberg Regional Council

Challenges

- The rezoning of the Great Sandy Marine Park Zone by the Department of Environment and Science caused delays and challenges through acquiring the marine park permit for the beaches located inside the zone.
- Turtle nesting season considerably limits the delivery season for the sand nourishment works.
- The original plan to utilise the dredge spoil from Bundaberg Port did not go ahead given the non-viability of engaging a commercial operator.
- Long distance to the identified suitable sand sources increasing the cost of the delivery phase.

Outcomes

As a part of this stage of the project the following actions were completed:

- A successful completion of the scope of the implementation study including sand sourcing study, monitoring and site survey, detailed design and cost estimates, approvals for beach nourishment, revegetation and access management.
- > The next steps of the SEMP includes:
 - Delivery of the sand nourishment and revegetation in the priority areas of Jayteens Park and Nielson Beach
 - Planning for the delivery of the works in Bargara Beach and Turtle Park

Project Partners

- Bundaberg Community
- Bundaberg Regional Council
- Taribelang, Gooreng Gooreng, Gureng, and Bailai through the Port Curtis Coral Coast Trust Limited (PCCC)
- Bargara State School
- QCoast₂₁₀₀ Program
- > Local Government Association of Queensland
- Department of Environment and Science
- Marine Parks
- Port of Bundaberg
- Alluvium Consulting
- > SMEC



For more information Please contact

Engineering Services Branch: engineering@bundaberg.qld.gov.au

Project Website: https://www.ourbundabergregion.com.a u/bargara-shoreline-erosionmanagement-plan







