

City of Moreton Bay

Dohles Rocks Seawall Options Analysis

Case Study

Introduction

Summary	Dohles Rocks is located on the northern foreshore of Pine River in Griffin. It is bounded on the south by Pine River and to the north and east by the Dohles Rocks Reserve and Hays Inlet Conservation Park. The Dohles Rocks foreshore has a mix of seawall, mangroves, and muddy and sandy beaches. The existing 540 m seawall fronting the Dohles Rocks foreshore is considered in poor condition and is showing significant deterioration.
Project overview	➤ The project reviewed options to manage coastal erosion considering legislative constraints and stakeholder feedback. ➤ Council undertook an options analysis of different coastal erosion management types for the locality. ➤ Legislative constraints had impacted Council's ability to maintain the existing seawall and needed to be considered when identifying a preferred option.

Project Details

- Identification of options for the replacement, rehabilitation (hybrid), or removal (including nature-based solution) of the Dohles Rocks seawall.
- Pre-feasibility assessment of options including:
 - Analysis of environmental conditions
 - Identification of community values
 - Key issues, relevant legislation, approvals required
- Multi-criteria analysis of identified options.

Direct engagement with stakeholders to develop a bespoke solution to the management of the Dohles Rocks seawall.



Drivers

- City of Moreton Bay's Living Coast Plan (CHAS) identified that the seawall at Dohles Rocks should be renewed considering future sea level rise impacts.
- Due to the legislative constraints, Council wanted to consider a different approach to identifying the preferred shoreline management approach.

Benefits

- The options analysis was the first time that Council has taken a step back to consider a broad range of options for the future of the seawall.
- Replacement of the seawall with another seawall, or a replacement with a vegetated shoreline solution were both equally preferred options.
- The methodology and options considered can be used for other seawall renewal projects delivered by Council.

Engagement Activities

- The project had planned to engage with the community to develop the seawall options.
- However, there was concern that this would create community expectations when works may not occur for at least another ten years.
- Engagement was then limited to key internal stakeholders and the State Government.

Process / Guidance

- Initial engagement utilising previous CHAS community engagement data to understand shoreline management preferences
- Draft shoreline management options
- Stakeholder feedback to identify preferred shoreline management option
- Final option identification and feasibility

Problems / Challenges

- The significant change to planned community engagement impacted the project early. However, reflecting on the adapted approach, it was a positive outcome that supported key stakeholders influencing the outcome. If the project had engaged broadly with the community, it would have involved educating them on the various options. This was underestimated by the project.
- Feedback from State Government officers involved in the project was positive. There was an appreciation to have an opportunity to provide advice at the earliest step of erosion management.

Outcomes / Conclusions

- A repeatable methodology for assessing shoreline erosion management options was developed that considers a broad range of measures beyond Council's BAU.
- A CHAS and its end of Phase reports provides a strong foundation for options assessment and should continue to be utilised in coastal planning.
- The result of the options assessment has proceeded to business case development considering broader infrastructure defence options needed including a bund.

Project Partners

- *Queensland Government*
- *Alluvium Consulting*

For more information

Please contact us

Name (position): Glen Dare

Email: glen.dare@moretonbay.qld.gov.au