Toogoom Beach Shore Protection coastal management and coastal engineering synergies and conflicts

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ABSTRACT

Suggested Theme: "People Partnerships and Place"

Hervey Bay City Council and the Environmental Protection agency recommended the building of a seawall at Toogoom Beach 10m from the beach properties to control shoreline recession. Hervey Bay City Council engaged Connell Wagner to provide detailed design and technical documentation for the seawall construction and a range of shore protection studies, including geotechnical study, acid sulfate soil investigations, sediment transport modelling, beach nourishment and assistance with development application.

The seawall is designed to suffer minimum damage for the 50 years Average Recurrence Interval (ARI) cyclone event and its stability was verified for the 100 year ARI cyclone event while the nourishment works were design to restore the 1980's dune buffer.

The presentation provides details of the sediment transport modelling, geotextile seawall design and associated engineering issues. The second part of the presentation discuss the project history and how form a "revetment design" the design works were extended to other shore protection measures, while keeping ahead of time and budget. This illustrates the synergies that may arise from a Council based specialist coastal management office using coastal engineering specialist skills from consultancies can translate potential source of conflicts with stakeholders into project strength.

The creation of the Great Sandy Marine Park while the project was at the Development approval Stage imposed new strict conservation area over the envisaged area to be protected. This new conflict of interest is still to be resolved.

About the Authors

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Gildas is a coastal and maritime engineer with experience in the planning, study, design, construction and documentation of marine projects. He is specialised in coastal environment modelling, maritime development planning and detailed design.

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