

“Where will our knowledge take you?”

Coastal and Maritime Structures

Asset Condition Monitoring and Management



Coastal and marine structures are located in aggressive, corrosive environments, and therefore ongoing monitoring and regular inspection to identify maintenance and repair requirements and to determine whether they are

“ **BMT JFA offers asset management services to aid the inspection and maintenance of coastal and marine structures including the development of whole-of-life asset management strategies.** ”

providing the required level of service is critical. Minimum requirements recommend that port structures are inspected on an annual basis but differing materials and structures dictate varying regimes of inspection and maintenance. For instance, revetments or breakwaters constructed from armour rock or concrete armour units may require virtually no maintenance over a 30 – 50 year design life. For coastal structures located in public amenity areas, regular inspection can ensure that no health and safety issues develop. Adhoc inspections following extreme storm events are important for coastal protection structures which may be subject to scour and undercutting, or seaward facing vertical walls of piers and jetties, where loss of mortar or blocks can have serious consequences if left undetected. Condition monitoring of ‘natural assets’ such as dunes, beaches and vegetated gravel ridges is also important when developing integrated coastal zone management strategy.

BMT JFA is experienced in evaluating whole life costs based around future inspection and

maintenance requirements and can therefore provide cost effective and upfront total cost estimates for the client. BMT JFA also has experience in the survey of natural foreshore and estuarine assets and the development of information logging protocols and database construction for data capture.

Key Capabilities:

- Breakwater and seawall structures
- Jetty and wharf structures
- Coastal protection and beach control structures
- Whole life asset management
- Coastal zone and asset management strategy.

Related Projects:

- Shell Marine Structures asset Management Plans
- Two Rocks Marina Breakwater Monitoring
- Woodside LPG Jetty Shore Protection Survey.
- Ports Australia WSCAM Peer Review

Services Offered:

- Identification and categorisation of assets
- Onsite inspections and condition assessments
- Inspections undertaken in accordance with MRWA guidelines and PIANC Inspection guidelines for marine structures
- Assessment of maintenance and repair requirements
- Preparation of cost estimate for remedial works
- Preparation of asset management plans and procedures.